

2016 GRFD



ANNUAL REPORT



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2016 SUMMARY

FY 2017 FISCAL

CITY BUDGET	\$ 473,131,118
CITY GENERAL FUND	\$ 132,858,747
GRFD ADOPTED BUDGET.....	\$28,998,743

2016 BREAK – EVEN DATE

MAY 26TH

THE DAY THAT THE CUMULATIVE VALUE OF PROPERTY AND CONTENTS SAVED BY THE GRFD SURPASSED THE DEPARTMENT'S ANNUAL BUDGET EXPENDITURE.

PERSONNEL

200 (YEAR END)	2016 PERSONNEL (100%)
174	OPERATIONS PERSONNEL (87%)
13.....	ADMIN. PERSONNEL (6.5%)
9.....	PREVENTION PERSONNEL (4.5%)
4	TRAINING PERSONNEL (2%)

EMERGENCY OPERATIONS

31,908	APPARATUS RESPONSES
23,166 ..	EMERGENCY INCIDENTS (ALL TYPES)
14,687	EMERGENCY MEDICAL SERVICE
2,435	FIRES AND FIRE ALARMS
661.....	FIRES EXTINGUISHED
95.99%	PROPERTY SAVED RATE
\$151,691,233	PROPERTY SAVED VALUE
4.01%.....	PROPERTY LOST RATE
\$6,083,867.....	PROPERTY LOST VALUE
19	CIVILIAN INJURIES
2	CIVILIAN DEATHS
42	FIREFIGHTER INJURIES
0	FIREFIGHTER DEATHS

FIRE CHIEF'S MESSAGE



Serving as the Fire Chief for the men and women of the Grand Rapids Fire Department since late June of 2016 has been a great honor. We experienced many changes in 2016, not only in the city we serve but in our organization. The Grand Rapids Fire Department has a rich history of over 168 years and in many ways is a very traditional department. This is starkly contrasted by our leading edge in Accreditation and Lean methodologies which we use to assess our performance and outcomes. It is this mix that makes the Grand Rapids Fire Department a unique leader in the Fire Service.

The department focuses its efforts in five main areas; response, training, prevention, wellness and support services. Budgets are formed, goals are set, and performance is monitored, all focusing on providing the highest level of service to our community through a commitment to excellence.

The City of Grand Rapids is rapidly evolving into a metropolitan type of city, with our downtown growing vertically due to several high-rise construction projects underway. A .67% population increase from the previous year has resulted in an overall population of 195,097. The challenge for the Grand Rapids Fire Department in 2017 will be to maintain our staffing and training at levels which adequately protect the evolving risk in our community.

In 2017 we will continue to increase our efforts in recruiting Firefighter candidates to better match the makeup of the diverse community that we serve. Those efforts will be bolstered by our partnerships with the Grand Rapids Public Schools JROTC programs and the Boy Scouts of America Fire Explorer Post.

I continue to be impressed daily with the dedication and hard work of the men and women of the Grand Rapids Fire Department and I am very proud to serve this department and this community.

A handwritten signature in black ink, appearing to read "John S. Lehman". The signature is stylized with a large, sweeping "J" and "L".

Fire Chief, John S. Lehman



MISSION STATEMENT

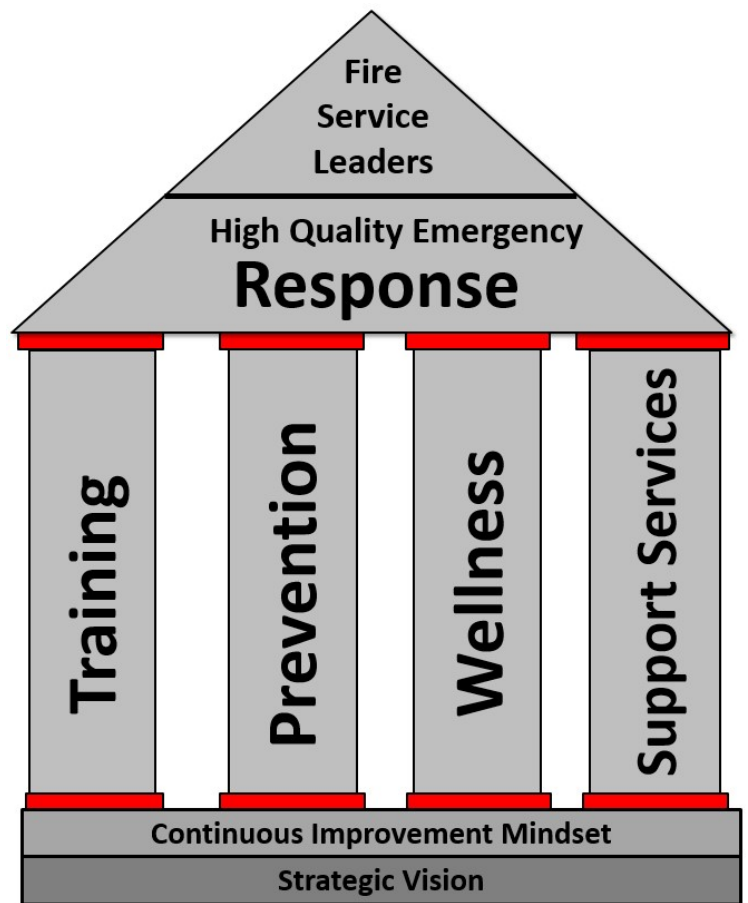
The GRFD will provide the highest level of service to our community through a commitment to excellence.

VISION STATEMENT

The GRFD strives to maintain accredited status and serve as a national fire service leader that aligns with community needs and provides a secure work environment for its members. This is accomplished by diverse partnerships, increased adaptability, fluid communication, complete transparency and a preventative mindset towards all endeavors.

VALUE STATEMENT

THE GRFD IS
COMMITTED
TO DOING WHAT IS
RIGHT THROUGH:
HONESTY
INTEGRITY
LOYALTY
TEAMWORK
EXCELLENCE

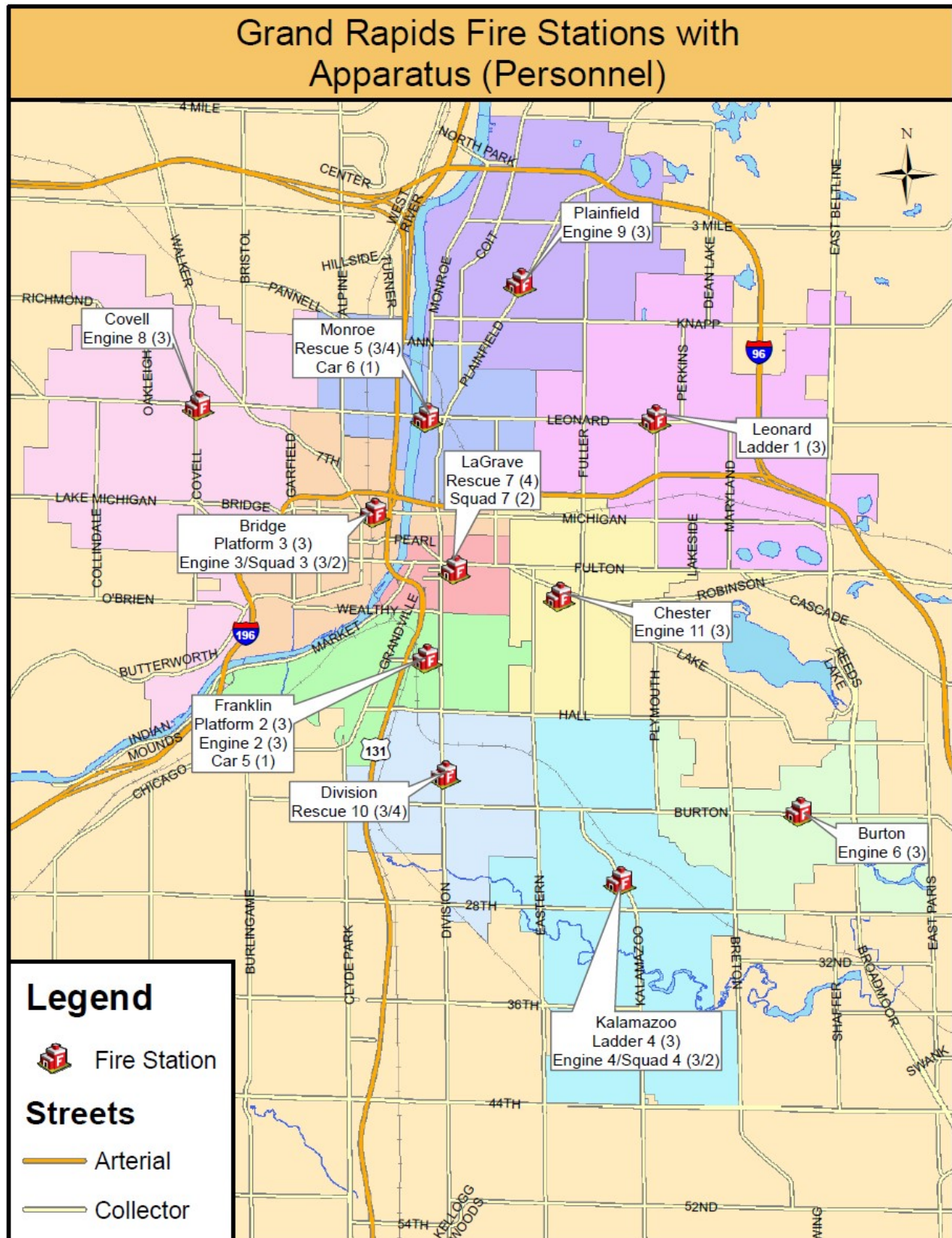


GRFD PILLARS



2016 GRFD JURISDICTIONAL MAP

WITH ASSIGNED APPARATUS/(PERSONNEL COUNTS)



SUPPORT SERVICES

HUMAN RESOURCES— FISCAL SERVICES— MAINTENANCE—PPE—PREVENTION



A/DEPUTY FIRE CHIEF RON TENNANT

It has been my honor to serve as the Acting Deputy Fire Chief of Support Services since January 6, 2016, beginning upon the retirement of Deputy Chief Kevin Sehlmeier.

OVERVIEW:

Human Resources

In January of 2016, the GRFD hired 12 recruit firefighters. We had 11 members leave the service during the year. Dawn Kulak was hired to be our new Fire Financial Administrative Coordinator. The City Manager selected John Lehman as our new Fire Chief after a nationwide search and coordination from within the department. Thank you to Deputy Fire Chief Peg Felix for taking on the Interim Fire Chief duties and doing a fantastic job while in the position. Thanks also to Battalion Chief Nancy Boss for filling in as Acting Deputy Chief of Operations for those six months. The department was involved in many city initiated recruitment efforts in 2016. This office coordinated and managed the Fire Department's portion of the 2016 promotional process, hiring for the 2017 recruit academy, and the start of the 2017 promotional process. Over the course of the year, we promoted 8 personnel. While promotions were delayed until the arrival of Fire Chief Lehman, everything was prepared for him so that he could make knowledgeable and timely decisions. Under the leadership of Chief Lehman, we held a promotional ceremony, our first in quite some time, recognizing the accomplishments of the promoted individuals.



Employee Development

Each quarter, I met with the Fire Department Captains, twice at headquarters, and twice at their work location. I met with many program managers and other supervisors to discuss continuing operations and succession within the variety of programs and services we deliver. We continue to regularly evaluate our probationary employees. We also have started a program that has newly promoted employees spend time with a variety of administrative, maintenance and support divisions to develop a better understanding of the entire organization, as well as their role in the organization.

Department Communications

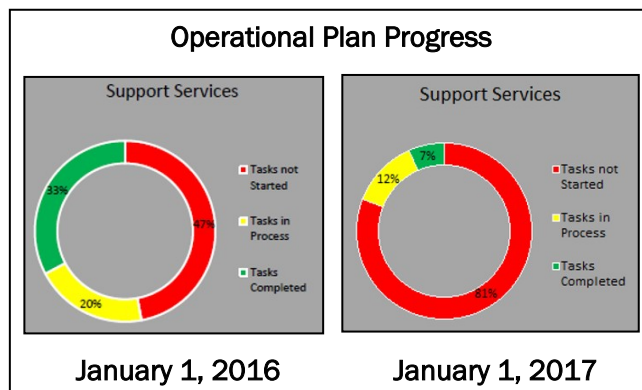
A deliberate effort to improve the communications within the Fire Department is under way. I made over 90 station visits, keeping in touch with various fire crews. We have instituted a Weekly Video that is recorded after our weekly administrative updates and posted for all personnel to review. We now have a weekly Friday gathering of administration personnel to share a variety of information personally. More frequent communication with officers of Local 366 has occurred. We have instituted a "Ride Along" program for our support personnel who have never been assigned to a 24 hour fire suppression company. This gives them an opportunity to understand the duties, responsibilities and working conditions that our suppression members work under. I worked with the Deputy Chief of Operations to assist with the planning and deployment of our first "All Officers" Meeting in September. I also responded to 39 alarms in 2016.

SUPPORT SERVICES

HUMAN RESOURCES— FISCAL SERVICES— MAINTENANCE—PPE—PREVENTION

Planning and Pillar Oversight

The Deputy Chief of Support Services continues to meet regularly with other Chief Officers and the Planning Division to participate in Master Planning, Budget Planning, Strategic Planning and Operational Planning. I am the owner of the GRFD Support Services “Pillar”, and the backup for the Response, Prevention and Wellness Pillars. I am also the support for managing the Annual Calendar and Quality Assurance for the Capital Projects. I own 55 individual tasks under the various Pillar goals, and support several more.



Program Oversight

The Deputy Chief of Support Services has direct oversight of 25 different Fire Department Programs and their managers. Significant activity has occurred in the following areas:

Mask Repair – This year we finished up the grant funded procurement of an entire new inventory of Self Contained Breathing Apparatus for our suppression personnel. This included working with the purchasing department, ordering, accepting delivery, working through a variety of problems that we found and finally ensuring effective training for our personnel before the deployment of this equipment. As we near the end of the year, we are working on the disposition of our old equipment. We were also able to procure a new breathing air compressor and fill stations, as well as a variety of other equipment all related to this purchase.

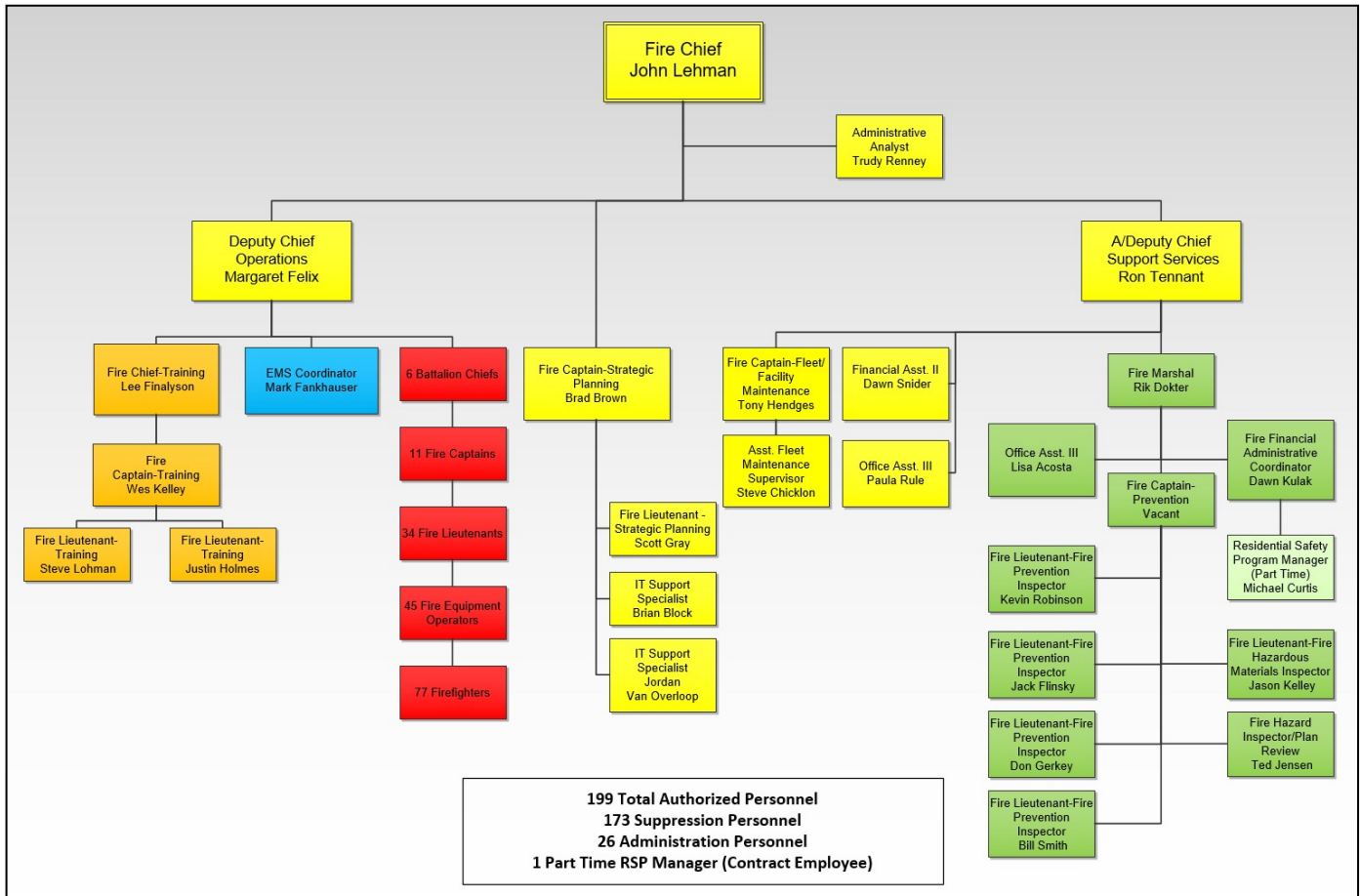
Thermal Imaging – We were able to equip our entire fleet with Argus MI-TIC-S Thermal Imaging Cameras, replacing our worn, outdated equipment.

Personal Protective Equipment - All personnel were issued the latest standard of helmets. We now have 100% of our personnel in firefighting turn out gear that is four years old or less, and back up gear that is generally not older than 8 years. This is very important, as it allows us to have serviceable back-up gear to allow us to wash the front line equipment as it becomes dirty. This is a major step in reducing the risk of cancer in our members.

Good and Welfare

The GRFD Honor Guard took a lead role in the coordination of the GRFD response to the sudden and tragic loss of Lt. David Knisley. Chase Bouchard, the North Muskegon child who wished to be a firefighter in North Muskegon in 2015, was honored at the Make A Wish Foundation’s annual “Wish Ball” this spring in Grand Rapids. I presented him with Honorary Grand Rapids Firefighter status in front of the Grand Rapids community at the ball. I coordinated the scheduling of our personnel to attend Innovation High School’s morning handshake each Wednesday. We have established the framework for the Fire Department’s regular involvement with each Public High School’s Junior Reserve Officers Training Corps program. This recruitment effort should be in full operation by the end of January, 2017. This program is intended to expose Grand Rapids Public School students to the fire services, and the opportunities it offers. We want to show that the local fire service is a viable career option, and create a pipeline into our hiring and selection process.

2016 ORGANIZATIONAL CHART



GRAND RAPIDS FIRE DEPARTMENT STRATEGIC PLAN FY 2016 - FY 2018				Updated By: Fire Chief John Lehman		Date: 9/9/2016		
Mission Statement		The GRFD will provide the highest level of service to our community through a commitment to excellence.			Values Statement	The GRFD is committed to doing what is right through: Honesty Integrity Loyalty Teamwork Excellence		
Vision Statement		The GRFD strives to maintain accredited status and serve as a national fire service leader that aligns with community needs and provides a secure work environment for its members. This is accomplished by diverse partnerships, increased adaptability, fluid communication, complete transparency and a preventative mindset towards all endeavors.						
Command Staff COWS Analysis		<div><div><div><div>Challenges</div><div>Politics 11 Money 10 Resources 8 Community 7 Media 2 Events 2</div></div><div><div>Opportunities</div><div>Regional Cooperation 11 Citizen/Police Education 11 Private Partnership 11 Mobile Integrated Health Care 11 Finance 11 Leadership 11 Diversity 11</div></div></div><div><div>Weaknesses</div><div>Human Resources 12 Attitude 5 Communication 5 Time Management 3 Training 3 Labor Relations 3 CIO 2</div><div><div>Strengths</div><div>Continuous Improved Model 11 Leadership 11 Training 11 Appearance 11 Workforce 11 Operations 11</div></div></div><div><div>These are key areas we will be expected to address in the Strategic plan for FY 2016-2018.</div><div><div>The status of the GRFD per metrics: Overall: 100% Excellent, 100% Good, 100% Fair, 100% Poor, 100% Very Poor</div><div><div>What are the main barriers to creating a positive work environment in the GRFD?</div><div><div>1. Lack of communication 100%</div><div><div>2. Lack of training 100%</div><div><div>3. Lack of resources 100%</div><div><div>4. Lack of leadership 100%</div><div><div>5. Lack of diversity 100%</div></div></div></div></div><div><div>Internal Survey - 98 Responses (48.51%)</div><div><div>What are the main barriers to creating a positive work environment in the GRFD?</div><div><div>1. Lack of communication 100%</div><div><div>2. Lack of training 100%</div><div><div>3. Lack of resources 100%</div><div><div>4. Lack of leadership 100%</div><div><div>5. Lack of diversity 100%</div></div></div></div></div><div><div>Do you feel you are properly trained in the latest areas to do your job?</div><div><div>1. Yes 100%</div><div><div>2. No 100%</div></div></div><div><div>Do you receive regular and useful feedback from your direct supervisor?</div><div><div>1. Yes 100%</div><div><div>2. No 100%</div></div></div><div><div>Would it be helpful for your personal/professional development to receive formal feedback on a more consistent basis?</div><div><div>1. Yes 100%</div><div><div>2. No 100%</div></div></div></div><div><div>External Survey - 114 Responses</div><div><div>Q2: How would you rate our personnel in terms of being courteous, helpful and professional?</div><div><div>1. Excellent 100%</div><div><div>2. Good 100%</div><div><div>3. Fair 100%</div><div><div>4. Poor 100%</div><div><div>5. Very Poor 100%</div></div></div></div></div><div><div>Q3: How would you rate our service?</div><div><div>1. Excellent 100%</div><div><div>2. Good 100%</div><div><div>3. Fair 100%</div><div><div>4. Poor 100%</div><div><div>5. Very Poor 100%</div></div></div></div></div><div><div>Q4: How would you rate the timeliness of our response?</div><div><div>1. Excellent 100%</div><div><div>2. Good 100%</div><div><div>3. Fair 100%</div><div><div>4. Poor 100%</div><div><div>5. Very Poor 100%</div></div></div></div></div><div><div>Q5: Have you seen the GRFD at a community or school event?</div><div><div>1. Yes 100%</div><div><div>2. No 100%</div></div></div><div><div>Q6: If the GRFD develops a community CPR class, would you be willing to host or attend?</div><div><div>1. Yes 100%</div><div><div>2. No 100%</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>						
Area of Focus		Outcomes and Strategies			Fiscal Year 2016-2018 Goals			
Response		Outcome 1: Achieve 90 th Percentile for Core Performance Metrics Strategy 1: Improve Resource Allocation Outcome 2: Increase Customer Satisfaction and Awareness Strategy 2: Implement Customer Service Q/A and Departmental Marketing Program			1- Prioritize Daily Work 2- Standards of Coverage – Core Performance Metrics 3- Regional Response and Mutual/Auto Aid 4- Citizens Academy 5- Dispatch Continuous Improvement 6- Super Users Awareness Health Care			
Training		Outcome 1: Staff Preparedness Aligns with Industry Standards Strategy 1: Clearly Defined, Scheduled and Monitored Training Outcome 2: Seamless Personnel Transitions Strategy 2: Innovative Leadership Programs			1- Clearly Defined Training Requirements 2- Defined Competency Levels Objective Met 3- Training Center Replacement Plan 4- Burn Building Enhancements 5- Suppression Training Company 6- Utilize More City University Classes 7- Enhanced Medical First Responder Skill Set 8- Mentoring Programs 9- Job Shadowing/Rotation 10- External University Leadership Academy			
Prevention		Outcome 1: Reduce Commercial Fire Loss by 10% Strategy 1: Implement/Improve Programs to Enhance Commercial Inspections Process Outcome 2: Reduce Residential Fire Loss and Injuries by 10% Strategy 2: Enhance RSA Effectiveness and Improve Public Education Efforts			1- Increase Pre-Planning 2- Implement a Risk Based Inspection Cycle 3- Clearly Define Job Responsibilities and Work Flow 4- Marketing Materials 5- Increase Fire Prevention's ISO Score by 10% 6- Increase Compliance to Compress the Inspection Time Cycle 7- Rebrand Bureau as Community Risk Reduction Division 8- Enhance Residential Safety Assessments Process			
Wellness		Outcome 1: Reduce Injury Rates by 10% Strategy 1: Develop Targeted Programs for Injury Reduction Outcome 2: Increase Use of Encompass and CISM Programs Strategy 2: Improve Employee Awareness and Advocacy of Mental Health			1- Promote City Offered Fitness Classes 2- Develop a Flexible Workout Schedule 3- Increased Hydration 4- Nutrition Training 5- Establish Baseline Employee Health Care Costs 6- Enhance Wellness Intern Program 7- Laundry for Uniforms to Reduce Pathogen Transmission Exposure 8- Establish a Culture and Morale Training Program for all Employees			
Support Services		Outcome 1: Provide Value for Internal and External Customers Strategy 1: Continuous Improvement of Resource Management Outcome 2: Well Informed and Educated Stakeholders Strategy 2: Transparent and Timely Communications			1- Accreditation 2- ISO Compliance 3- Fiscal Diversity 4- Hiring and Diversity Plan 5- Continuous Improvement 6- Asset Management 7- Process Mapping for Job Duties 8- Standard Work 9- Union Relationship			

HUMAN RESOURCES

11 personnel concluded their service with the GRFD during 2016.

Capt. Tim Szotko	January 4
E.O. Jeff Madura	January 4
E.O. Denis Hatt	January 6
Fire Chief Laura Knapp	January 9
D.C. Kevin Sehlmeier	January 12
F.F. Dan Overbeek	February 28
Lt. Scott DeVoll	July 5
F.F. Stanley Burns	July 22
E.O. Jeff Steere	August 22
E.O. June Faber	November 19
*Lt. David Knisley (special tribute page 11)	May 8

8 personnel received promotions within the GRFD during 2016:

Captains

Capt. Doug Carley	08/29
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Lieutenants

Lt. Lou Houtman	08/29
Lt. Steve MacBride	08/29

Equipment Operators

E.O. Merle Jones	08/29
E.O. Greg Miller	08/29
E.O. Roy LaGrone	08/29
E.O. Jorden Haisma	08/29
E.O. Dan Weatherwax	08/29

FISCAL SERVICES – TRUDY RENNEY

FY2016 began with an amended Fire Department general fund budget of \$27,167,536 and \$495,844 in capital funds for a budget of \$27,663,380. We also received approval to carry forward \$226,818 from the FY2015 budget for projects that were not completed in FY2015. Revenue received in FY2016 was \$596,294 from fees and State funding and \$824,722 from the Income Tax and Income Tax Reserve funds. Total budget funds utilized in FY2016 budget year resulted in the department being 1.82% over budget for FY2016.

FY2017 began with a general fund budget of \$28,998,743 and \$488,283 in capital funds for a budget of \$29,483,329. In August 2016, GRFD received a FEMA grant award in the amount of \$198,600 for the continuation of the Residential Safety Program. The estimated revenue of \$488,627 is a combination of fees and State funding. The first half of the FY2017 year closed with approximately 52.04% of the amended budget remaining and 57.45% of projected revenues having been received.



Cover of the Grand Rapids Final Fiscal Plan FY 2017-2021, illustrating the new MSU research facility.

HONOR GUARD AND AWARDS COMMITTEE

HONOR GUARD – CAPTAIN MARK NOORMAN AND LT. MATT KEUSCH

The Honor Guard consists of 16 members from all different ranks within the organization. Capt. Mark Noorman and Lt. Matt Keusch lead the Honor Guard. The primary mission of the Honor Guard is to be present at all funeral services for retired and active members. This proud tradition is well received by the families as we honor the deceased and comfort their families. Your Honor Guard also participates in parades, ceremonies and other special events when called upon. The Honor Guard continued to improve in 2016 by attending external training. The GRFD was also very fortunate to receive assistance from the Lansing Fire Dept., East Lansing Fire Dept., Ingham County Sheriffs Dept. and GRPD for Lt. Knisley's memorial service.

Our goal for 2017 is to participate in more special events and get as many Honor Guard members as possible trained by the Goshen, Indiana Police Department Honor Guard School. We plan to host a 5 day class in Grand Rapids and invite other agencies to attend this training to help off-set our cost for this invaluable training.

In 2016 the Honor Guard put in a total of 698 off duty hours and 87 on duty hours.



We participated in 12 funerals, 7 special events (parades, ceremonies, etc.) and 4 Honor Guard training sessions, for a total of 785 hours of activity.

AWARDS COMMITTEE – LT. MATT KEUSCH


Chair – Matthew Keusch

John Keillor	Jeffrey VanderWall	David Noorman
Jeffrey Lysiak	William Smith	Corey Kernodle

The awards committee meets monthly to review award nominations. To ultimately vote whether a nominee is award worthy, there is typically an investigation and interviews are conducted. Much of the committee members' time is spent on this work, as well as preparing for the annual awards ceremony.

Steve MacBride was recognized as the 2016 Fire Fighter of the Year. Congratulations to all of the other recipients of service awards and commendations that were presented last October!

**GRAND RAPIDS
FIRE DEPARTMENT
2016 AWARDS
CEREMONY**



**OCTOBER 25, 2016
7:00PM
GVSU - RICHARD M. DeVos
CENTER
LOOSEMORE AUDITORIUM
401 W. FULTON
GRAND RAPIDS, MI 49504**

Remembering Lieutenant David Knisley



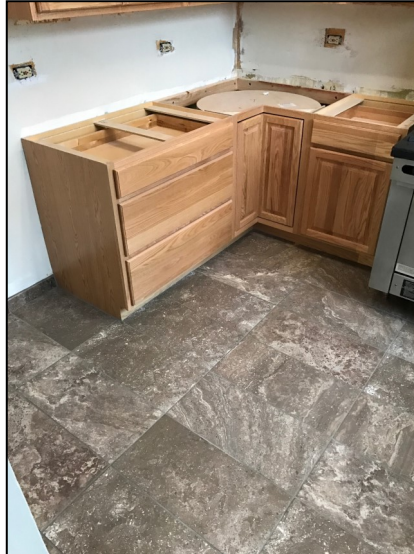
2016 was a tough year for members of the GRFD and the community. On May 8, 2016 we lost Lt. David Knisley. He was taken from us in a fire on his boat "Gem N I - II", where he enjoyed spending his summers. Brother Knisley's death was difficult for the men and women of the GRFD, but they pulled together along with the community to honor Brother Knisley and comfort each other and his family. Brother Knisley's reputation became quickly apparent as condolences streamed in from across the country. Lt. Knisley was active not only in the GRFD where he was involved with Haz-Mat and Tech Rescue, he was also a member of the Michigan Urban Search and Rescue team. On his time off Brother Knisley was very involved with announcing Monster trucks, Jet Ski, and motor cross sporting events as well as car shows across the country and Canada. Lt. Knisley will be sorely missed as he had a great knowledge of rope, trench, and collapse rescue, as well as a generous spirit and an opinion on just about everything. Lt. Knisley leaves behind his longtime girlfriend Lori, daughters Zoe and Aubrey, his parents David and Sue, his brother David and his sister Shon T.



FLEET AND FACILITIES - CAPTAIN HENDGES

Building Projects:

- All capital projects now align with the City's recent implementation of the Asset Management Plan.
- Kitchen renovations were started at Covell and Division Stations.
- An assessment was completed for concrete and asphalt repairs and maintenance at multiple Fire Stations: LaGrave, Burton, Bridge, and Plainfield.
- Research and bid specifications for replacement of the Covell Station HVAC controls and components.
- The uniform washers and dryers went through several procedural revisions, with installation scheduled for early 2017.



Division Station Kitchen Project

Apparatus Projects:

- Repurposing and refurbishment of E2 in accordance with the Apparatus Reset Plan.
- Repair of accident damage to P3.
- Repurposing and refurbishment of P3 in accordance with the Apparatus Reset Plan, including the addition of a Class A foam system and upgrading the warning light system to LED's.
- Purchase of new ventilation saws for the aerials.
- The Apparatus Reset Plan was reviewed and updated to match the visions and goals of the new Fire Chief.



Platform 3 being refurbished at Renewed Performance Inc.

PERSONAL PROTECTIVE EQUIPMENT - CAPTAIN DEFOREST

The PPE program continued to upgrade the personal protective equipment for members of the department by purchasing forty-seven sets of Morning Pride Viper turn out gear. This was year three of a department wide replacement program.

- One hundred Honeywell Helmets were purchased to complete a cycle of replacing all of the helmets in the department. The new helmets feature an updated ANSI approved drop-down eye protection system.
- Sixty-five pairs of Globe leather fire boots were purchased in phase one of a three year program to provide each member a new pair of leather boots. In addition, a complete ensemble of protective equipment was purchased for all newly hired members of the department.
- The goal of the program is ensuring each member has two sets of useable gear that are less than ten years old, and the PPE committee continues to plan for the future by replacing gear on a set schedule for a percentage of the department each year, rather than waiting to replace everything at once.



FIRE PREVENTION

FIRE INSPECTIONS – PLAN REVIEW

PUBLIC EDUCATION – RESIDENTIAL SAFETY PROGRAM – FIRE INVESTIGATIONS



FIRE MARSHAL ERIC DOKTER

FIRE INSPECTIONS

The Fire Prevention Bureau focuses inspection efforts to support the department's risk assessment. In 2016, the bureau's building inspectors continued to focus on the city's highest risk buildings and processes through the bureau's Operational Permit program. Existing building staff and office staff also work to administer the maintenance of installed fire protection systems throughout the city as a part of the GRFD's Fire & Life Safety Program.

- Higher risk occupancies in the city were identified via the Risk Assessment Program. In 2015 and 2016 both high and moderate risk occupancies were identified, and key fire protection and hazard information was gathered by fire suppression

crews. This information was then collated and is now available to fire companies through the computer-aided dispatch (CAD) system as they respond to alarms.

- Fire safety inspections were performed in high rise and large re-adapted multi-use buildings (formerly mostly warehouses and factory buildings).
- A vacant building identification and evaluation program was developed to decrease the likelihood of firefighter injuries which are more common in this type of fire. The program will be implemented in 2017.
- 1,094 inspection activities were conducted in existing buildings in 2016.
- The Fire Prevention Division continued its efforts to ensure that installed fire protection systems continue to function as designed. Well over 2,000 fire suppression and fire alarm system inspection reports were reviewed in 2016. Follow up is performed to ensure repairs of defective systems are completed. Inspections of occupancies that had deficient systems are also finalized.
- All ArtPrize venues (over 160 locations) were inspected over a one week period in early September.
- On seven evenings in 2016, after-hour nightclub inspections were conducted to ensure adequate crowd management, and guard against overcrowding in approximately 88 venues.

CONSTRUCTION/PLAN REVIEW

Our Fire Prevention staff continues to provide technical expertise in the area of fire protection system installation and acceptance for new building and remodeling projects. This application of fire protection technical expertise begins in pre-construction meetings with builders and developers, continues through system plan reviews and consultation with contractors, and culminates with the acceptance, inspection and testing of the installed systems. During this whole process GRFD fire inspectors work closely with City personnel from a variety of different departments in order to provide a seamless integration of services. These collaborations include: preconstruction and on-site consultation, inter-departmental meetings and review, and Design Team meetings.

- Due to the rate of construction and redevelopment, 691 fire alarm and suppression system plan reviews were performed, an increase of 38% over 2015.
- Approximately 673 fire alarm and suppression system rough-in and final inspections were completed, also related to the increase in construction.

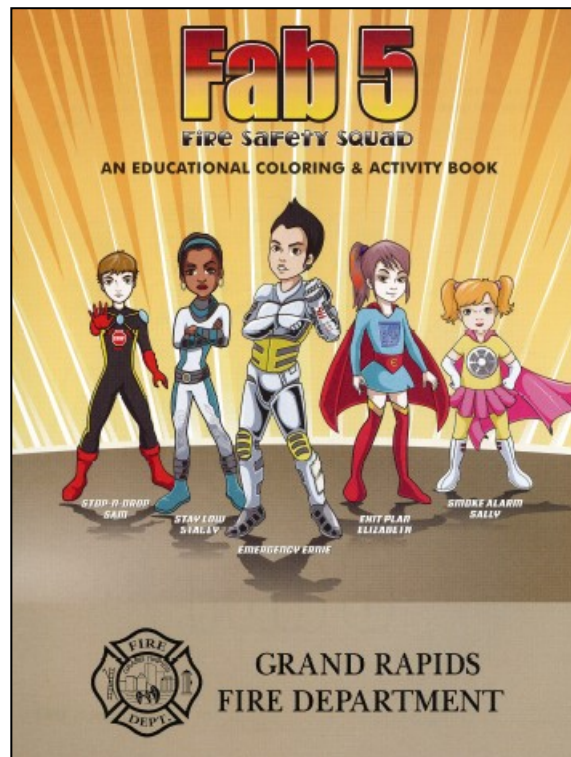


PUBLIC EDUCATION

The GRFD is always educating the public about fire safety. In addition to conducting Home Safety Assessments, our firefighters frequent block parties, make schools visits, and attend festivals and trade shows to spread the word about smoke alarms and fire safety.

In 2016, more than 306 senior citizens participated in the Senior Fire Safety Program. Assistant chaplain Bill Vander Vennen, a former volunteer firefighter, delivered our message during 11 presentations throughout the city's retirement communities and churches. These customized sessions serve as a great awareness builder and reminder for our more seasoned citizens.

Lastly, more than 1,795 children received home fire safety education through the use of the Residential Safety Program's Safety Trailer, a mobile classroom that simulates a home. During the program, children learn to identify safety hazards in the home, and they also respond to a simulated fire. Using theatrical smoke and actual smoke detectors, children practice safely evacuating the "home". The children leave with educational materials to share with their parents so that the skills they learn can be used by the entire family.



FIRE MATCH - LT. HAROLD ELMORE

The overall success of the Fire Match program is solely based on the amount of participants that are reached, counseled and educated. Statistics are still telling us that over 80% of the juvenile fire setters will return to setting fires if they are not properly educated. The fire service is constantly trying to improve on reaching juvenile fire setters from areas that are traditionally missed. Those areas are as follows: Courts/Probation, Child Protective Services, foster groups and the unreported.

Since 2014, the Grand Rapids Fire Match program has successfully partnered with the Kent County Probation and Courts department and the State of Michigan DHHS/CPS. This partnership has resulted in 72% of our Fire Match case load in 2016 and strongly reflects the number of juvenile fire setters that would have traditionally been missed in the Grand Rapids metro area. There is still work to be done with reaching the unreported juvenile fire setter. Using the Home Safety Assessment to ask about fire setting behavior has resulted in one referral. When the RSP assessment form is moved to the I-Pads, this particular question may be highlighted on its own page so that it is not overlooked.

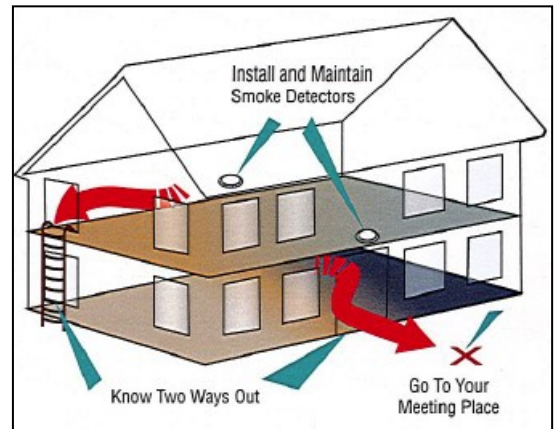
In 2016 the Fire Match program was involved with counseling organizations such as Arbor Circle and Wrap Around. With approximately 50% of the fire setters in 2016 being in counseling prior to entering the program, Fire Match was a helpful tool in providing assistance for families that are in crisis mode.

In 2016, the Fire Match program saw 18 juvenile fire setters in the Grand Rapids metro area (20 with 2 returned fire setters).

RESIDENTIAL SAFETY PROGRAM

The Residential Safety Program continues to support the department's federally funded, home safety assessments. This program gives us the opportunity to deliver fire safety education and install smoke alarms utilizing our on-duty fire crews.

- Home Safety Assessments were conducted in 1,389 homes, with 8,597 smoke alarms installed. A total of 39,358 alarms have been installed in 6,385 homes since the beginning of the program.
- 348 of the homes we assessed (25%) did not have a working smoke alarm and 71% of the homes had two or less working smoke alarms installed. For comparison, the average home requires approximately 6 to 7 smoke alarms for proper protection.
- 67% of the 1,389 alarms removed were inoperable.
- The Residential Safety Trailer program was presented to children in a variety of venues by the GRFD, American Red Cross personnel and the Boy Scouts.
- Smoke alarm purchases were funded by a federal FEMA grant and installed by on-duty GRFD fire crews.
- To help further promote this program, we partner with organizations such as LINC, Helen DeVos Children's Hospital, American Red Cross, GRPS and similar institutions.

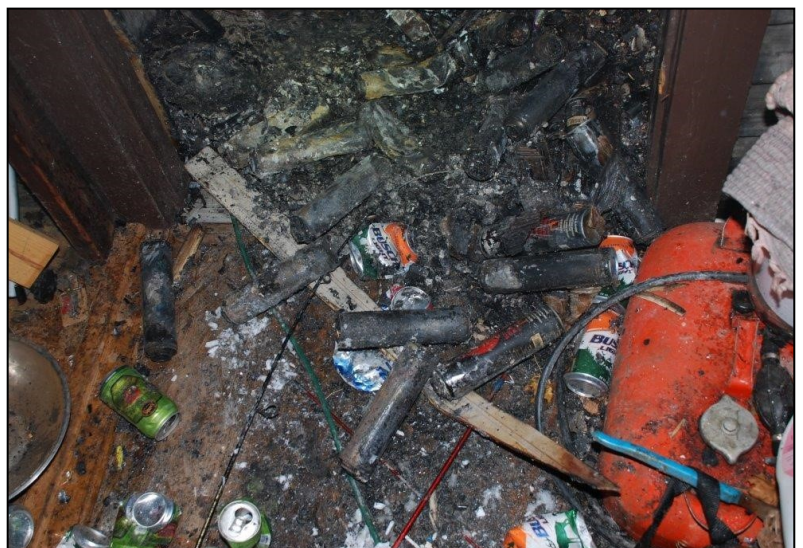
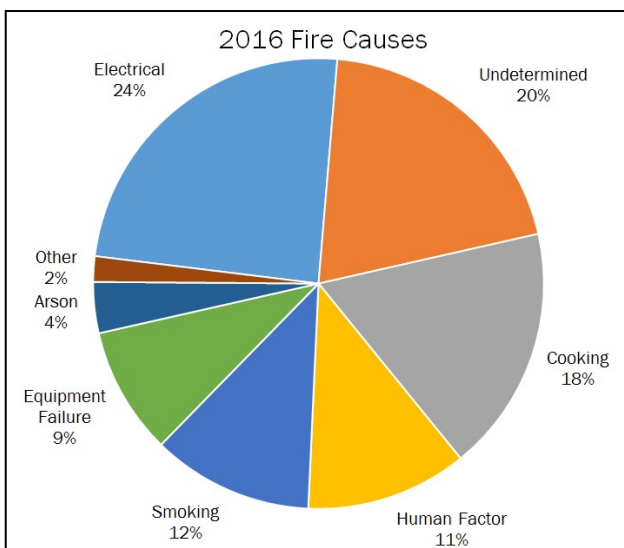


FIRE INVESTIGATIONS

Fire inspectors are trained by the Michigan State Police or at the National Fire Academy to provide origin and cause determination. While the identification of intentionally set fires is a very important component of the reason fire investigations are conducted, identifying the cause of even accidental fires assists the fire department in formulating its approach to the development of its overall fire prevention message.

In 2016, GRFD fire inspectors performed 73 fire investigations, including two fatal incidents. The leading causes of fire in Grand Rapids are outlined in the chart below.

Support is contributed to our fire investigation efforts by the Grand Rapids Police Department, the Kent County Sheriff's Department, the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives, and the Michigan State Police.



PLANNING DIVISION

STRATEGIC PLANNING OFFICE - INFORMATION TECHNOLOGY

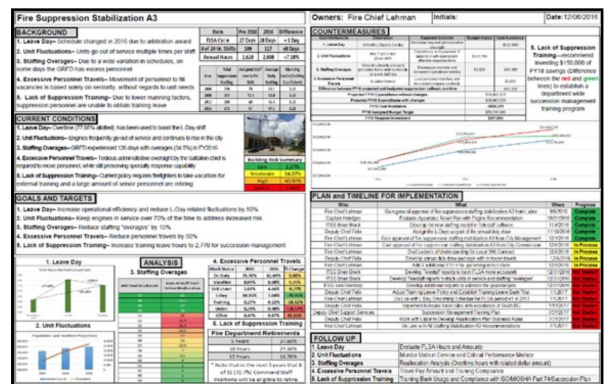
STRATEGIC PLANNING OFFICE - CAPTAIN BRAD BROWN

Planning- The planning division facilitated two strategic planning sessions to ensure the FY16-FY18 strategic and operational plans remain a focal point for the organization. These meetings involved a wide cross section of the department whose work centered on identifying successes that had taken place as part of the plan, pointing out opportunities to adjust or change goals to better align with the current state of the department, and lay out areas of focus for the upcoming months.

Accreditation- After receiving a recommendation for accreditation in December of 2015 from the peer assessment team provided by the Center for Public Safety Excellence, the planning division, A/Fire Chief Felix and Deputy City Manager Eric DeLong appeared before the CPSE commission in March of 2016. After approximately 15 minutes of briefings and questions, the commission voted unanimously to grant accredited status to the GRFD. Grand Rapids is now one of approximately 230 agencies in the world to have achieved this designation. As this is a continuous improvement process, there are extensive annual reporting requirements, with a full re-evaluation every five years to ensure the department is moving forward with positive changes to improve service levels to the community and its members.

ISO- Grand Rapids prepared for and underwent an Insurance Services Office evaluation during 2016. The dispatch center, water department and fire department all provided extensive documentation to align with the new fire suppression rating schedule. The effort was worth it, as the GRFD remained a class 2 organization, raising their score from an 80.30 in 2012 to 88.18 in 2016, a 9.81% improvement.

Lean- The fire department hosted several external agencies at the Monday MDI walk and hosted a Michigan Lean Consortium event during the spring. After Chief Lehman's arrival, the focus shifted to making several improvements to the deployment model and staffing methods via an A3. After multiple iterations, data gathering, extensive analysis, and presentations to the city, parts of the A3 were accepted, allowing the GRFD to present to city council early in 2017. Approval would allow changes to the current work schedule to smooth staffing and keep engines 3 and 4 in service on a more consistent basis.



PLANNING DIVISION

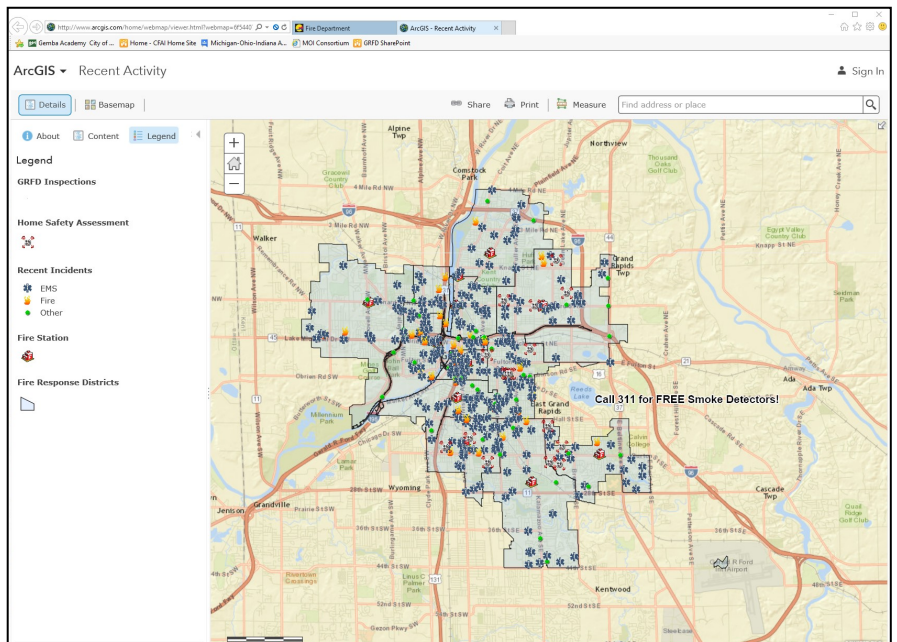
STRATEGIC PLANNING OFFICE - INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

Jordan Van Overloop

Areas of focus for data analysis in 2016 included extensive work on the new leave day and staffing models, the station relocation project, ISO compliance, and the accreditation process.

- “Recent Activity” is an online map added to our website. This map details the GRFD’s activity in the community over the past week with general information including incidents, inspections and HSAs.
- On August 20 the city experienced a tornado. Analysis was conducted to assess the scope of the damage and to focus operations in the neighborhoods most in need.
- Another 2,969 risk assessments were completed over the summer months using the Fulcrum app, which was expanded to include tracking of hydrant snow removal.
- Firehouse saw a major change with incident reporting, data outliers can now be addressed directly by company officers. The new thermal imaging cameras, SCBA’s, air bottles, voice amps and ropes were also added to the inventory module.



Brian Block

IT improvements for the stations in 2016 included:

- Adding GPS repeaters to the inside of apparatus bays to make signing into CAD easier and provide better internal GPS locations and data.
- Adding wireless connections to the stations, which provided the ability to have the Mobile Data Terminals connected to CAD while apparatus are in the station, thereby maintaining more reliable CAD connections.
- Apple TVs were assigned to the stations as a platform for using VIMEO, the replacement for the outdated VLADY video training system.
- Officer cell phones were issued to frontline apparatus to help with continuity of operations, supporting better communication within the department as well as the ability to use the cellular system when radio traffic is not possible or at a premium.



OPERATIONS

BATTALION FIRE CHIEFS - EMS

GRFD TRAINING – GRFD REGIONAL TRAINING CENTER



DEPUTY FIRE CHIEF MARGARET FELIX

The men and women of the Grand Rapids Fire Department responded to 23,166 incidents in 2016. These incidents constitute another year of increased opportunities to provide positive outcomes in emergency situations for the citizens of Grand Rapids and its surrounding communities.

The Training Division held another recruit class to continue to supply replacement firefighters for those who are retiring. 12 new firefighters were added to the suppression ranks in 2016. After the recruits had completed their shift training, they were used to bolster the L-day shift from September through the end of the year. This had a positive impact on daily staffing

number and offered these new employees an advantage of working in most of the fire stations within the city. These firefighters graduated the training academy well versed in firefighting, medical, river rescue, and confined space rescue. The Training Division also concentrated on the deployment of the new SCBA's, which were received through a FEMA Grant. Numerous SOG's for training were updated and revised to the current best practices.

We continued to adjust the new work schedule, which opened up time for training or Residential Safety Program appointments. This work schedule was a cultural shift and created many administrative challenges, but also offered an increase in opportunities to serve the citizens of Grand Rapids. The Residential Safety program calendar was engineered around the repeating nine-week cycle of the shifts. This was a chance to create a fixed schedule for the fire companies to know exactly when they would be scheduled increasing their time management of the duties required for each fire company. The suppression crews installed 8,597 smoke detectors and conducted home safety inspections in 1,389 homes. The Grand Rapids Fire Department also used the evening hours to do training in a high rise building. Through connections with staff at 300 Monroe Ave NW and using the rooms about to be remodeled, the Grand Rapids Fire Department capitalized on an opening to deploy hose lines and hone the incident command structure skills needed when an actual event happens. We utilized 513 hours and 144 personnel over nine sessions on this one particular training.

In 2016, the Operations Division continued with risk assessments of commercial buildings within the city of Grand Rapids. Suppression personnel participated in performing 2,967 risk assessments. These risk assessments are turned into pre-fire plans with access through CAD to the computers in the fire apparatus; the crews can use this information when responding to emergencies.

The street construction season of 2016 brought additional challenges in coverage for the west side of Grand Rapids. Simultaneous closures of the Franklin Street Overpass and the Leonard Street Bridge over the Grand River necessitated staffing a Class A pumper at Bridge Street between July 5, and September 8, 2016.

Suppression crews continued with a long-standing program of presenting fire safety practices to second-grade students throughout the City of Grand Rapids, visiting 38 schools and instructing 1,796 students.

The monthly officer's meetings continued in 2016 with the Battalion Chiefs leading strategies and tactics sessions. This training resulted in skill improvements for the officer ranks.

The Operations Division worked closely with the Emergency Communications Center to enhance dispatch operations for the department. The Effective Response Force for each type of incident as shown in the Standards of Coverage was confirmed in the dispatch assignments. Automatic Vehicle Location (AVL) dispatching went live on December 1, 2016, which will send the closest unit to the incident. This improved dispatching method will be a huge step in the progressive improvement and transformation of the Grand Rapids Fire Department.

I am honored by the commitment our personnel exhibit for the citizens of Grand Rapids and the department.



EMERGENCY MEDICAL SERVICES - (EMS) COORDINATOR

CAPTAIN MARK FANKHAUSER

The professional delivery of Emergency Medical Services (EMS) is one of many service platforms the Grand Rapids Fire Department (GRFD) endeavors to provide for the citizens and visitors of Grand Rapids. The EMS program operates under the proven practice that high quality training and education will transfer into high quality patient care. Our department is licensed with the State of Michigan as a Medical First Responder (MFR) Agency and is compliant with Kent County Emergency Medical Services, Inc. (KCEMS) the local regional Medical Control Authority (MCA).

The GRFD has 27 apparatus and 191 personnel licensed by the Michigan Department of Licensing and Regulatory Affairs (LARA) in addition to a professional relationship between the GRFD and the Michigan Department of Health and Human Services (MDHHS) – EMS Section, ensuring compliance with regulatory and industry driven best practices. In 2016, the GRFD successfully renewed its MDHHS-EMS Continuing Education Program Sponsorship. This affords our licensed EMS Instructor Coordinator to provide the required continuing education for department members.

2016 Medical Licensure Levels	2016 EMS Training Statistics
12 Licensed EMS Instructor Coordinators	96 Hands-On Training Sessions
18 Licensed Paramedics	2,681 Online EMS Training Sessions
48 Licensed EMTs	5,294 Hours of EMS Department Education
125 Licensed Medical First Responders	78 Hours Community-Based EMS Education
61 MDHHS Personnel Licensure Renewals	2 Multi Agency Training Opportunities
7 MDHHS Licensure Audits	362 Hours of EMS I/C Education

The GRFD responded to 14,687 requests for medical service in 2016, accounting for 63% of the total call volume. Sudden cardiac arrest incidents trended slightly lower in 2016. Those incidents were targeted for review under Quality Assurance with data indicating that 67 out of 192 documented arrests experienced a return of spontaneous circulation (ROSC) pre-hospital for a potential survival rate of 35%. Implementing protocols and deployment of Naloxone, which has been utilized on 106 suspected opioid overdose incidents, has heightened awareness of opioid abuse and has proven to be a successful addition to the scope of practice for Medical First Responders.

Several significant events occurred in 2016 that stand as a testimony to our high standard of care:

- 8 Medical Service Awards to GRFD Personnel.
- 35 Automated External Defibrillators (AED) were deployed throughout City-owned public buildings.
- Committee involvement with Kent County Ambulance Consortium group.
- Committee involvement with KCEMS Dispatch Steering and Review groups.
- Renewal of MDHHS CE Program Sponsorship.
- Renewal of MDHHS vehicle licensures.
- Committee involvement with KCEMS Agency and Advisory groups.
- Continued utilization of lean 5S methodology for EMS equipment and supply handling at individual stations.
- Community CPR initiative with Ottawa Hills High School 9th grade Class.
- Community CPR initiative with Covenant House Academy
- Partnership and development of education and training opportunities with area medical facilities and pre-hospital care providers.



SAFETY COMMITTEE – CAPTAIN MARK FANKHAUSER

The members of the Grand Rapids Fire Department Safety Committee are committed to ensuring that safety related issues are taken seriously, extensively reviewed, and recommendations are made that support industry best practices, providing the safest working environment possible for members of the Grand Rapids Fire Department. After many years of direct involvement with the Safety Committee, Acting Deputy Chief Ron Tennant has taken on additional job responsibilities that require his attention, although he will continue to provide guidance for the committee in an advisory role.

In 2016, through formal and informal leadership by the members of the Safety Committee, engagement by department members, and a positive mindset for the organization, awareness and commitment to striving for a safer working environment is evident.

2016 Safety Committee Statistics		2016 Safety Committee Team Members		
Committee Meetings	10	Appointed by Local 366		
Accidents Reviewed	19	FF Adamczyk	Captain Carmel	FF Lysiak
Injuries Reviewed	47	Appointed by Management		
Official Recommendations	2	Capt. Wes Kelley	Capt. Hendges	Capt. Fankhauser *
Reported Injuries	47	Mutual Appointment		
Reported Accidents	19	Deputy Chief Felix	* Denotes Committee Chair	

2016 Activities:

- Reviewed and implemented Cancer Prevention measures regarding personal decontamination procedures and Personal Protective Equipment (PPE) washing.
- Continued development and implementation of improved work and safety practices with the Michigan Department of Transportation, Michigan State Police, and local tow companies to enhance the capability of quicker clearing of highway emergencies, especially in the US-131 S-Curve, as well as enhancing our line of sight deployment methods.
- Deployment of new SCOTT Self Contained Breathing Apparatus (SCBA).
- Air quality monitoring at one (1) station to ensure air quality was within industry standards.
- Posted Fitness Safety Reminder posters at department physical fitness facilities.
- Pilot study for improved vehicle access by adding an external step.
- Assessed personnel and unit identification via facepiece and SCBA tank marking systems.
- Continued hydration education for personnel and provisioning of hydration for emergency incidents.
- Annual assessment of our mission as outlined by the Labor Agreement between the City and the IAFF Local 366 to ensure that we are doing what we have been created to do.
- For many of the concerns raised by individual members, we point them to the chain of command if that has not been attempted yet. We encourage them to come to us only if the system does not seem to not be addressing their concerns.
- We still seem to struggle with reliable accident reporting. We will be working closely with Risk Management and fire administration so that we can accurately track and review these incidents.
- Acting Deputy Chief Tennant continues to represent the fire service on the West Michigan Traffic Safety Advisory Committee.
- Captain Fankhauser and Acting Deputy Chief Tennant continue to participate with the City of Grand Rapids Accident Review Team.



BATTALION FIRE CHIEFS

The Battalion Chiefs coordinate and supervise the daily operations of the fire department. The Chiefs are located at Monroe Ave. Station (North Battalion) and Franklin St. Station (South Battalion). The North Chief supervises the operations of Leonard, Bridge, Monroe, LaGrave, Covell and Plainfield Stations, while the South Chief supervises the operations of Franklin, Kalamazoo, Burton, Division and Chester Stations.

Battalion Chiefs serve as the Incident Commander at any large scale incident such as a structure fire, vehicle extrication, confined space incident, hazardous materials incident or other event typically requiring 3 or more responding units. A Battalion Chief may also assist at an incident as a Safety Officer, Operations Officer, Branch Director, or as a Division/Group Supervisor as determined by the Incident Commander.



Battalion Chiefs have a variety of administrative duties which include the following:

- Coordinating the daily staffing of suppression personnel for the entire department. The South Chief determines overages and vacancies for suppression units for the oncoming shift, and balances personnel accordingly to meet the needs of the staffing matrix as determined by the department Standards of Coverage.
- Conducting a daily Live Meeting via Skype to coordinate suppression activities. The North Chief conducts the meeting at the start of each duty day. Information is shared regarding special events in the city, apparatus readiness status, weather conditions, river conditions, road closures, safety items, communications from administration and shift changeovers.
- Conducting training events with personnel in the battalion. Battalion Chiefs meet with personnel in the battalion on a monthly basis to engage in incident scenarios with the crews. The training could be a presentation on a particular topic, a simulated scenario, or a training evolution.
- Promoting a continuous improvement mindset. Chiefs coordinate an After Action Review (AAR) with the responding crews on all large scale incidents to take a critical look at how the events of the incident unfolded. The Battalion Chief writes a review that details which actions went well and areas of improvement that need to be addressed. The information is forwarded to the Deputy Chief of Operations in order to implement improved training or possible policy changes.
- Meeting with suppression personnel to foster department communication and problem solving. Chiefs schedule a monthly meeting with the station officer and crew to discuss current issues and concerns. The group works together to identify obstacles and generate solutions to problems or concerns.



NORTH BATTALION - BATTALION FIRE CHIEF BART PERRY

CRITICAL INCIDENT STRESS MANAGEMENT (CISM)

Operating as part of the “Wellness Pillar” of the GRFD, Critical Incident Stress Management (CISM) is a formal, professionally recognized process for helping first responders of all professions who are exposed to traumatic events. Also known as “psychological first aid” this confidential process in the GRFD is facilitated through a peer support group of 11 volunteers trained to deliver pre-crisis education and stress impact awareness, as well as post-event defusing for our personnel. Although, full “defusing’s” and “debriefing’s” continue to be rare events, GRFD team coordinators maintain a department wide

situational awareness for all events responded to, and frequently follow up by contacting department members on an individual or crew basis, depending on the type of event responded to and/or referral. Since its inception over 25 years ago, all GRFD CISM responses and individual requests for assistance continue to be answered on a volunteer basis, with peer counselors standing ready as a 24-hour a day point of contact for all members with emotional and mental health needs.

In 2016, we continued to develop behavioral health initiatives that solidify and strengthen our department’s commitment to the Wellness Pillar. Building on the successes of the previous year, we once again offered 3 cumulative stress awareness sessions for department members and their families. Additionally, we have developed strong relational ties with Encompass, our City’s Employee Assistance Provider, launching a collaborative department wide training program and instituting an Employee Assistance Program clinician ride along program to ensure the unique mental health needs of our firefighters and their families are being met.

Succession planning, expanded team membership and enhanced training initiatives continue to be important planning issues for our CISM program.

SELF CONTAINED BREATHING APPARATUS (SCBA) - CAPTAIN CRAIG VANDERWALL

2016 was a busy year for the mask room program. It has been a year of transition and upgrade and at the same time maintaining the equipment we have been using. The following statistics give a brief overview of the functions covered by the mask repair program.

- SCBA repairs – 77
- SCBA Flow tests – 95*
- Technician hours logged – 457
- Face piece fit tests – All personnel
- O2 cylinders filled – 500
- Air cylinders filled – 3,628

*As we transitioned to new SCBA’s we terminated flow testing of masks, therefore not all SCBA’s were tested during the year.

In addition to the statistics noted above, the mask room program executed an extensive overhaul of all the equipment related to the mask room program. Through a FEMA grant program we were able to upgrade our SCBA’s and related equipment. They were placed in service earlier this year and training was provided to all personnel.

We also researched and purchased a new 7500psi compressor along with new fill stations that will allow us to track the filling and history of each cylinder in our inventory. Each cylinder is equipped with an RFID tag that automatically generates hydrostatic testing dates, proper fill pressure and a fill history and cylinder service life.

It was a very busy year and I would like to thank all who participated in making the transition successful.

Captain Craig VanderWall

Mask Room Program Manager



SCBA education for Grand Rapids City Commissioners



NORTH BATTALION - BATTALION FIRE CHIEF RON TENNANT

HAZARDOUS MATERIALS /RRT 61

Regional Response Team 61 is trained and equipped to serve the Western Michigan (Region 6) communities in the event or threat of a chemical, biological, radiological, nuclear, or explosive emergency. The Grand Rapids Fire Department Hazmat Team is based at Franklin Station, and responds to chemical emergencies in the City of Grand Rapids. All members permanently assigned to that station are trained to the Hazmat Technician level of certification. Those personnel participate with RRT 61 members in weekly Friday training sessions to maintain their certification.

2016 Personnel:

Our Leadership Team is organized to spread the workload, improve effectiveness and efficiency, and to build for a smooth succession of leadership for the future:

- Program Manager – Lt Paul Mason
 - Equipment Manager – FF Mike Witteveen
 - Franklin Station Captain – Capt. Craig VanderWall
 - Hazmat Planner – Lt. Jason Kelley
 - Training Liaison – FF Justin Steeby
-
- 48 Hazardous Materials Technicians
 - 5 Hazardous Materials Specialists
 - 27 Members – Regional Response Team 61
(9 current vacancies)
 - 23 Franklin Station Hazmat Personnel



2016 Administrative:

We continue to attend Region 6 meetings, ensuring that the GRFD has a voice in our role in the Region. We will also be attending other group meetings as appropriate, such as the Kent County Local Planning Team meetings. We have been and will continue to seek out grant funding opportunities for equipment and training activities.

2016 Incident Response Summary:

15 RRT61
 2 Hazmat 1
 0 Hazmat 2 (WMD Trailer)

2016 Operational Incidents:

February 18	12:50	Franklin St. SE	Investigation
April 8	14:08	Leonard St. NW	Hydrocarbon Odor Investigation in a building
September 8	15:34	Leonard St. NW	Odor causing irritation Investigation
October 21	17:27	Sylvan Ave. SE	Substance causing irritation Investigation
October 31	14:26	Remembrance Rd. NW	Assist Walker FD - Ammonia Release – standby only
November 8	10:11	Oak Industrial Dr. NE	Investigation – no hazard found



NORTH BATTALION - ACTING BATTALION FIRE CHIEF COLLIN KELLY

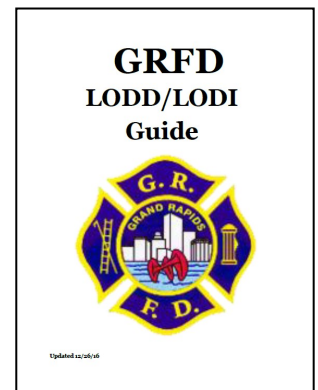


PERSONAL REFLECTIONS

2016 provided me with a great learning experience overseeing B shift and working side by side with some of the best firefighters in the business. Several house fires and various emergency incidents not only helped me hone my skills tactically, but also gave me an opportunity to mentor many of our younger officers and acting officers, assisting them with their incident command and accountability skills. The weekly MDI board walks, as well as monthly command staff meetings, gave me a greater appreciation for the hard work and dedication of our administration to move our great department into the future. Words cannot express my gratitude for the opportunity I was given.

LODD/LODI

I have put together an operational guidebook to assist our command staff in the event of a tragic “Line of Duty Death” or serious “Line of Duty Injury” to help streamline and consolidate necessary responsibilities. These informational binders were based primarily on the I.A.F.F.’s Investigation manual, which were integrated with our existing departmental policies. Contact information was obtained from the police department as well to expedite their involvement for an event we all hope we will never be faced with.

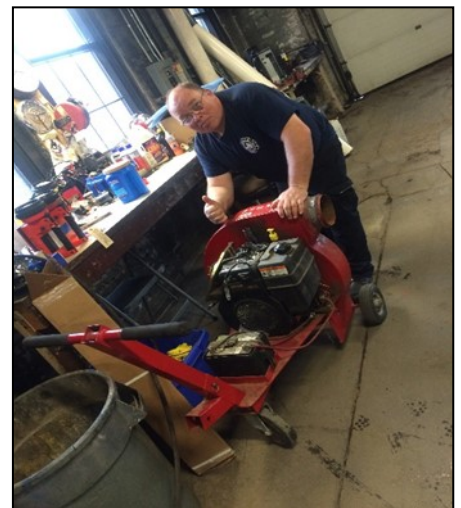


MONTHLY SCENARIOS/STATION VISITS

With the new emphasis on two-way communication utilizing the Battalion Chief as the medium, many innovative and common sense ideas were provided from the troops in suppression. It quickly became clear during the simulated scenarios that we not only have many capable officers, but personnel of all ranks have an excellent grasp of tactics, building construction, and fire behavior. The interaction gleaned during these training exercises benefited all and reassured me that our department has the talent to carry on at a high level for years to come. Overall company and department wide training throughout the year, including high rise operations, crane training, and company level exercises were well received and valuable. From the command level perspective, I witnessed the professionalism and dedication of our members as well as some of the areas we can improve upon. Overall, I can attest, we provide the highest level of service to our community through everyone’s commitment to excellence!

CELLULOSE VACUUM

B shift experienced several fires involving blown-in cellulose type insulation. This greatly hindered overhaul operations and led to extended man hours and property damage. It was discovered that a couple of neighboring departments utilize vacuums to extract the wet smoldering insulation with great success. After some research and legwork, a local businessman graciously donated an industrial vacuum to the department. The A3 process is being utilized to determine the viability of this product within the Grand Rapids Fire Department. This system has the potential to greatly reduce on scene time and the inherent damage to the structure with fires involving this type of building material.



NORTH BATTALION - BATTALION FIRE CHIEF TODD VANDERWALL

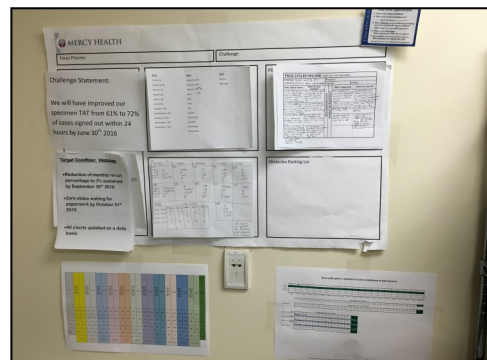


CONTINUOUS IMPROVEMENT IN SUPPRESSION

We continue to work on effective communication within the organization. Battalion Chiefs act as the conduit between top management and suppression personnel to deliver the direction of the organization, and to provide feedback from suppression personnel to top management on how programs, policies, training and new technology implementations are progressing. We have significantly increased our visits and meetings with suppression personnel to be more effective in communicating information. We are continuing to use the PDCA (plan, do, check, act) cycle more effectively as we move forward.

In early 2016, members from fire administration and I met with St. Mary's Hospital Continuous Improvement Team at their facility to observe a weekly Continuous

Improvement Team meeting and tour their facilities to understand further the ways that the hospital was implementing continuous improvement plans. That meeting inspired us to hold Kaizen events (brainstorming sessions) to further improve the ways we administer, and deliver services to our citizens and within our organization. We have conducted these events with our Residential Safety Program within our Fire Prevention Bureau, and in our suppression training events.



For example, last summer we engaged in an extensive, department wide, high-rise fire training event at City Hall with surrounding departments in neighboring communities. Command staff evaluated the effectiveness of our high-rise response incorporating our mutual aid partners. We identified areas with our



policies and procedures that need reviewing. Later, key members of our command staff got together in a kaizen event to evaluate what we had learned from our training and make decisions on where we need to go for the future. We plan on following that up with another high-rise training event in 2017.

We are becoming a very data driven organization by implementing metrics in a variety of areas to help make

decisions and evaluate the effectiveness of procedures that are in place. In late 2016 we changed the way we monitor our turn out and travel times. Previously, the shift battalion chief would review outliers and correspond with the appropriate crews to try to understand the reasons for the particular outlier. Now the company officer reviews the outlier and documents the explanation in our NFIRS reporting system. This moved the problem solving to the lowest level possible in accordance with lean principles. Initial indications show much more complete and accurate data, which is being used to identify root causes and work proactively to reduce outliers.



SOUTH BATTALION – BATTALION FIRE CHIEF NANCY BOSS

EMERGENCY COMMUNICATIONS

I began this year with a long term assignment as Deputy Chief of Operations. One of the first major projects was the Insurance Service Organization (ISO) review. From Dispatch, to the Water department, to apparatus and personnel, the ISO evaluates a large part of what the fire department does every day along with what we need and use in an emergency. The one thing that seems to affect the rank and file the most is the apparatus inventory. After a few problems with terminology, the GRFD stepped up and distributed inventory into a positive configuration. New pick head axes were purchased along with 5 complete high rise packs. Upon completion of the project, E12 was fully outfitted with an appropriate inventory and ready to be put in service in emergency callback mode. All that it needed was to pick up its cache of radios, which are stored at the training center. With hard work from the Planning Division and various department heads, the Grand Rapids Fire Department moved from a lower end class 2 department at 80.30, to a very high and solid class 2 with a score of 88.18. Thanks to everyone in the GRFD for making it possible. It is always nice to feel like we do a good job, but now the department has been recognized by ISO and received their stamp of approval.

A shift continued with officer development and the quarterly officer meetings. For the spring meeting officers were assigned to find an article and bring it back to the group so each officer could learn something new. Topics ranged from Leadership, Incident Command and Hazmat.



This summer the department tackled High Rise Fire training. Thanks to A/DC Ron Tennant and the training division, all GRFD crews, along with our auto-aid neighbors, got to participate in hands on training. The 9 story City Hall building was the victim of countless simulated fires. Every person that participated learned valuable lessons and will grow from the experience. We are looking forward to resuming high rise training in the spring of 2017.

In the fall, company officer training involved research of the large Saigon Market complex on 28th St. and created 5 different computer simulated fires in different areas of the building. The scenarios were run at various times during the day and night. The officers had to direct operations and rescue/extinguishment efforts. It was a good exercise and generated some great dialogue along with promoting problem solving skills.



SOUTH BATTALION - BATTALION FIRE CHIEF BRUCE VELDKAMP

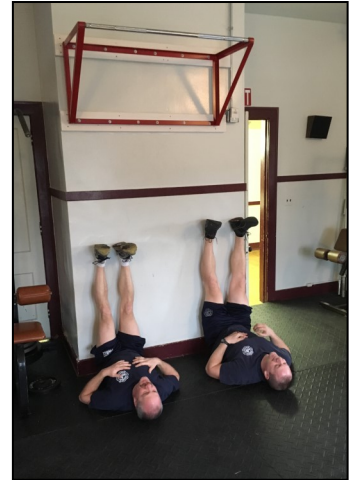


Chief Veldkamp is involved in the areas of Wellness, Extrication, and Tech Rescue, along with the regular duties of the South Battalion Chiefs.

WELLNESS

With Employee Wellness taking the spotlight more and more in the workplace, we continue to place a high priority on both the mental and physical wellness of our employees. This year we were able to purchase 7 additional elliptical machines so that each station and the Training Center now have their own. A continued

thanks to Casey Spielmaker as he has been our contact for equipment purchases and repairs for years. We also have been working with Grand Valley State University and their intern program. We have again had the pleasure of working with multiple interns who have provided both physical and nutritional training to our crews. A special thanks to Dan Weatherwax, who works very closely with the interns and this program. Nick Fedewa and the Wellness Committee continue to look into functional fitness and the best way to incorporate this to assist us in reducing the likelihood of injury to our members. Lt. John Zinn has been our lead on working with the City to develop baseline health care costs and incentives for employees who take charge of their own personal wellness and make strides to improve their health. Thanks to all those committed to making our workplace healthier and safer.



EXTRICATION - CAPTAIN DAVID NOORMAN

The extrication program holds quarterly training for our three Rescue Engine companies. We also train personnel on four Aerial companies. This comprises approximately 93 personnel. Training is accomplished using six department instructors spread across three shifts.

Training sessions held over 2016 focused on reinforcement of proper tool technique, patient and responder safety, vehicle construction, and various displacement techniques.

We began replacement of four sets of TNT hydraulic cutters currently carried on the Truck companies.



The TNT's are approximately 18 years old and are underpowered for today's extrication needs. They will be replaced with battery operated Genesis Combi tools. The replacement tools will free up valuable compartment space, be quicker to deploy, and be used for both extrication and rapid intervention needs.

As well as upgrading the hydraulic tools carried on the Truck companies, we have initiated replacement of all the hydraulic hoses and power plants currently carried on our Rescue Engines.



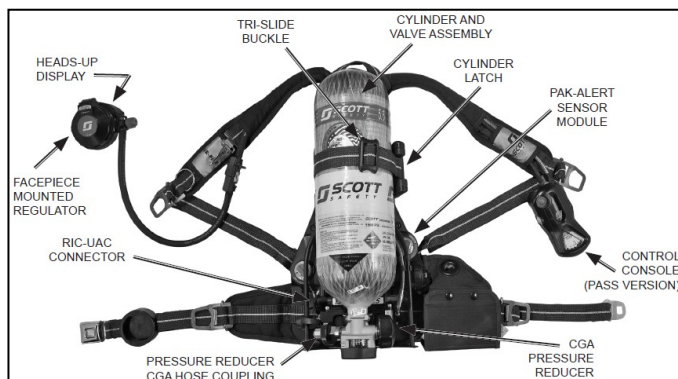
FIRE CHIEF-TRAINING LEE FINLAYSON

GRFD TRAINING - GRFD REGIONAL TRAINING CENTER

2016 passed with no major changes to the Training Division, with the exception of some paint on the wall. The roster included Fire Chief-Training Lee Finlayson, Fire Captain-Training Wes Kelley, Lt.-Training Steven Lohman and Lt.-Training Justin Holmes. With this roster of capable personnel, the GRFD provided over 48,000 hours of training in 2016.

In 2016 our goal was to make training available every day. The training staff attended 12 outside trainings for their professional development. We held numerous training sessions, and utilized external resources such as the National Fire Academy for a weekend officer development class entitled "Shaping the Future". Texas A&M's Extension Service provided funding and instructors for National Incident Management System classes 300 and 347: Intermediate Incident Command System for Expanding Incidents.

Training Division staff conducted the new Scott Air-Pak Self-Contained Breathing Apparatus (SCBA) training, which also included identifying some deficiencies with the frame design. This important training consumed much of the year, but at its completion all of our brothers and sisters were prepared to deploy the new SCBA's safely. We organized a Fire Instructor I class for our members, allowing 14 of them to attain Instructor I certification. We have a 100% success rate with this class. The Training Division also completed a Hazmat Technician course for Franklin Street station personnel.



The GRFD-RTC facility provides training opportunities for a number of outside users: the Center for Public Safety Excellence Accreditation program, the Michigan State Police Canine team, the Grand Rapids Police Department Special Response Team and K-9 unit, the Michigan Urban Search and Rescue Team's Search Dog classes, Community Emergency Response Teams, and the Michigan Volunteer Defense Force. The Training Staff hosted job shadowing for local high schools and the Gerald R. Fords Job Corps. We started to research a new endeavor for training the future with Kent Intermediate Schools.

Traffic Safety Incident Management training was provided this year. This class was two hours and included a lecture and hands on portion with large scale maps. The students were given various scenarios on accidents and asked to show how apparatus would park. The new signage on the S-curve was discussed and locations of signs were identified.



2016 GRFD RECRUIT ACADEMY

The GRFD-RTC hosted our second recruit class in as many years. We are happy to report that the 2016 class achieved the highest grade point average of any academy to this point, and also posted the fastest Physical Agility Test recorded as of this date. The recruits completed a 17 week academy. This academy included Driver Education and the “Everyone Goes Home” programs. Recruit classes continue to improve and carry the Grand Rapids Fire Department into the future. Thanks to the instructors for their efforts.

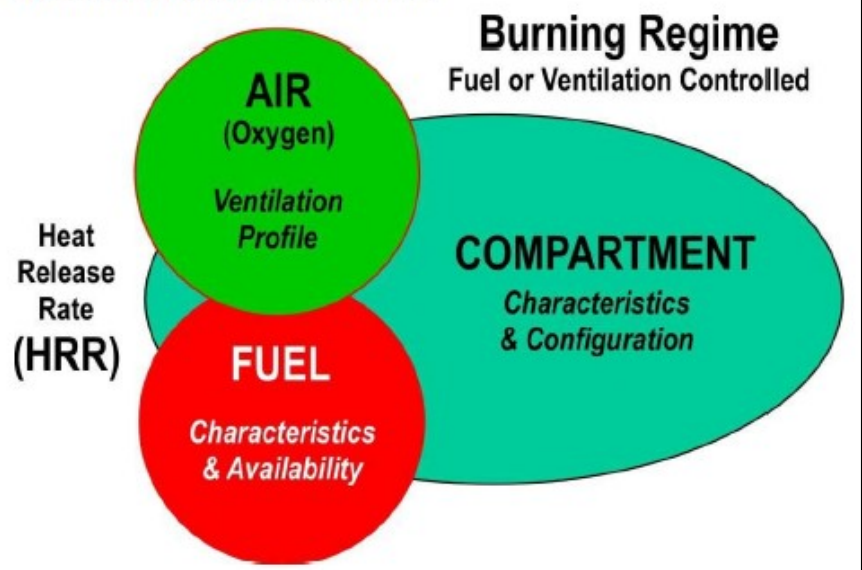


The class of 2016 included: Joel Borst, Justin Emery, Tom Felix, Gary Garza, Ben Ingersoll, Mark Klassen, Robert Long, Alex Van Putten, Matt Stevens, Erik Veldkamp, Nic Veldkamp and Tim Welsh

For 2016, Grand Rapids Fire Department employees completed an average of more than 230 hours of training, and showed an 82% compliance rate for Company Task Books. Improvements in Firehouse documentation of training allowed the department to exhibit better alignment with ISO requirements for employee training. We will keep looking towards the future and pushing for the 240 hour mark.

Respectfully,
Fire Training Chief Lee Finlayson

Figure 8. Compartment Fire Variables



Graphic from the Training Division Company Task Book



BENCHMARK PERFORMANCE STATEMENTS

Structure Fires

For 90% of **all structure fires** (low, moderate, high and special risk), the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is **7 minutes**.

Benchmark	(Low) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	01:56					01:56
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:45					01:45
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:45					05:45
04:00		Travel Time ERF Concentration	Urban	05:44					05:44
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	09:02					09:02
				279					279
07:00	Total Response Time	Total Response Time ERF Concentration	Urban	09:04					09:04
				277					277

The **effective response force (ERF)** is the minimum amount of staffing and equipment that must reach a specific emergency zone located within a maximum prescribed total response time and is capable of initial mitigation. The ERF is the result of the critical task analysis conducted as part of the community risk assessment process.

Benchmark	(Moderate) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:02					02:02
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:52					01:52
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	04:38					04:38
08:00		Travel Time ERF Concentration	Urban	09:46					09:46
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	07:22					07:22
				174					174
11:00	Total Response Time	Total Response Time ERF Concentration	Urban	12:22					12:22
				62					62

For 90 % of **moderate risk structure fires**, the total response time for the arrival of the effective response force, consisting of **19 personnel**, shall be **11 minutes**.

BENCHMARK PERFORMANCE STATEMENTS

For 90% of **high risk structure fires**, the total response time for the arrival of the effective response force, consisting of **25 personnel**, shall be **13 minutes**.

Benchmark	(High) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:22					02:22
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:48					01:48
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	03:54					03:54
10:00		Travel Time ERF Concentration	Urban	12:11					12:11
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	06:53					06:53
				181					181
13:00	Total Response Time	Total Response Time ERF Concentration	Urban	14:21					14:21
				40					40

For 90% of **special risk structure fires**, the total response time for the arrival of the effective response force, consisting of **34 personnel**, shall be **15 minutes**.

*Note that in 2016 there were not enough special risk structure fires to perform a 90th percentile baseline analysis.

Emergency Medical Services (EMS)

For 90% of **all emergency medical services incidents** (low, moderate, high and special risk), the total response time for the **arrival of the first due unit**, staffed with a minimum of two firefighters is **7 minutes and 30 seconds**.

Benchmark	(Low) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	03:05					03:05
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:38					01:38
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:01					05:01
04:00		Travel Time ERF Concentration	Urban	05:01					05:01
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:25					08:25
				14,987					14,987
07:30	Total Response Time	Total Response Time ERF Concentration	Urban	08:25					08:25
				14,984					14,984

BENCHMARK PERFORMANCE STATEMENTS

For 90 % of **moderate risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **5 personnel**, shall be **9 minutes and 30 seconds**.

Benchmark	(Moderate) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	03:15					03:15
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:50					01:50
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	06:12					06:12
06:00		Travel Time ERF Concentration	Urban	08:05					08:05
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	09:45					09:45
				624					624
09:30	Total Response Time	Total Response Time ERF Concentration	Urban	11:11					11:11
				441					441

For 90% of **high risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **10 personnel**, shall be **11 minutes and 30 seconds**.

Benchmark	(High) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	03:01					03:01
01:30	Turnout Time	Turnout Time 1st Unit	Urban	02:13					02:13
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	06:10					06:10
08:00		Travel Time ERF Concentration	Urban	08:39					08:39
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:54					08:54
				43					43
11:30	Total Response Time	Total Response Time ERF Concentration	Urban	12:31					12:31
				12					12

For 90% of **special risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **19 personnel**, shall be **11 minutes and 30 seconds**.

*Note that in 2016 there were not enough special risk EMS incidents to perform a 90th percentile baseline analysis.

BENCHMARK PERFORMANCE STATEMENTS

Hazardous Materials

For 90% of **all hazardous materials incidents** (low, moderate, high and special risk), the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is 7 minutes.

The **effective response force (ERF)** is the minimum amount of staffing and equipment that must reach a specific emergency zone located within a maximum prescribed total response time and is capable of initial mitigation. The ERF is the result of the critical task analysis conducted as part of the community risk assessment process.

Benchmark	(Low) HazMat - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:55					02:55
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:48					01:48
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	08:36					08:36
04:00		Travel Time ERF Concentration	Urban	08:41					08:41
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	11:32					11:32
				59					59
07:00		Total Response Time ERF Concentration	Urban	11:39					11:39
				57					57

For 90% of **moderate risk hazardous materials incidents**, the GRFD will respond with an effective response force of **7 personnel**, including a minimum of 1 hazardous materials technician, within **9 minutes total response time**.

For 90% of **high risk hazardous materials incidents**, the GRFD will respond with an effective response force of **13 personnel**, including a minimum of 5 hazardous materials technicians and 1 hazardous materials specialist, within **11 minutes total response time**.

For 90% of **special risk hazardous materials incidents**, the GRFD will respond with an effective response force of **5 personnel**, comprised of 5 weapons of mass destruction technicians, within 11 minutes total response time.

*Note that in 2016 there were not enough moderate, high and special risk hazardous materials incidents to perform a 90th percentile baseline analysis.

BENCHMARK PERFORMANCE STATEMENTS

Technical Rescue

For 90% of all **technical rescue incidents**, the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is 7 minutes.

For 90% of **trench rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 7 operations level responders, within **11 minutes** total response time.

For 90% of **collapse rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 7 technician level responders, within **11 minutes** total response time.

For 90% of **confined space rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 8 operations level responders, within **11 minutes** total response time.

For 90% of **vehicle extrication incidents**, the GRFD will respond with an effective response force of **11 personnel**, within **11 minutes** total response time.

For 90% of **machine extrication incidents**, the GRFD will respond with an effective response force of **13 personnel**, within 11 minutes total response time.

For 90% of **elevator incidents**, the GRFD will respond with an effective response force of **10 personnel**, within **11 minutes** total response time.

For 90% of **river rescue incidents**, the GRFD will respond with an effective response force of **17 personnel**, within **11 minutes** total response time.

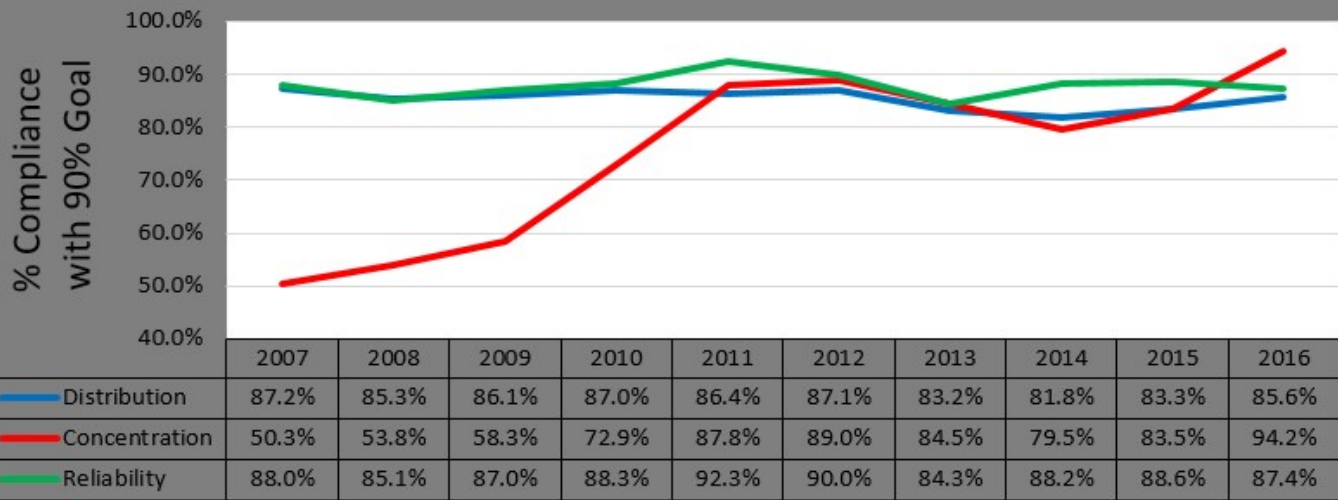
For 90% of **lake/ice rescue incidents**, the GRFD will respond with an effective response force of **13 personnel**, within **11 minutes** total response time.

Benchmark	Vehicle Extrication - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	03:32					03:32
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:44					01:44
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:17					05:17
08:00		Travel Time ERF Concentration	Urban	Not Enough Data					Not Enough Data
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	09:23					09:23
				29					29
11:00		Total Response Time ERF Concentration	Urban	Not Enough Data					Not Enough Data
				6					6

*Note that in 2016 there were not enough technical rescue, trench rescue, collapse rescue, confined space, machine extrication, elevator, river rescue or lake/ice rescue incidents to perform a 90th percentile baseline analysis.

CRITICAL PERFORMANCE MEASURES

Critical Performance Measures 2007 - 2016



Simultaneous incidents serve as a decision point for both the distribution and concentration of resources. When multiple alarms occur in a single first due district, either a second unit in that district or resources from adjoining districts must be utilized for response. 2016 saw an 8.59% increase in the simultaneous call rate compared to 2015. Division, Kalamazoo, Bridge, and LaGrave districts led the city in the rate of concurrent calls for 2016, with many other districts seeing a rise for this metric. The tornado on August 20 had a significant effect on the increase of simultaneous alarms for the year. With up to six concurrent calls in the Division district throughout the event, their rate increased by 32.72%.

Simultaneous Call Percentage by Station District

Station	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bridge	8.4%	8.9%	5.7%	6.9%	9.14%	9.00%	9.07%	9.54%	10.19%	10.01%
Burton	2.8%	2.7%	2.6%	4.2%	4.16%	4.29%	4.85%	4.43%	6.07%	4.80%
Chester	2.4%	4.6%	3.8%	5.1%	6.12%	4.88%	7.69%	8.57%	7.05%	9.00%
Covell	4.0%	2.6%	3.2%	4.3%	6.31%	7.40%	6.52%	7.22%	7.28%	7.31%
Division	3.7%	4.1%	3.7%	6.1%	7.69%	6.72%	8.70%	6.71%	7.18%	9.53%
Franklin	8.3%	10.1%	5.4%	7.6%	6.39%	6.52%	5.03%	5.60%	7.30%	6.61%
Kalamazoo	8.4%	8.1%	7.4%	8.8%	8.92%	9.87%	11.31%	10.79%	11.56%	12.73%
LaGrave	5.4%	5.6%	5.1%	9.5%	10.50%	10.97%	9.72%	10.32%	7.45%	9.81%
Leonard	5.4%	2.6%	6.1%	3.8%	4.95%	5.64%	6.86%	8.70%	6.97%	9.23%
Monroe	5.0%	4.1%	3.3%	3.9%	4.74%	5.89%	6.90%	5.37%	8.59%	8.25%
Plainfield	1.7%	4.2%	3.1%	2.5%	4.39%	2.69%	3.62%	4.14%	6.68%	3.96%

City Wide Simultaneous

2007	52.88%
2008	53.74%
2009	50.16%
2010	51.94%
2011	54.80%
2012	56.04%
2013	51.81%
2014	56.18%
2015	55.29%
2016	60.04%

Aligning with the best practices in the fire service and the international accreditation process, the GRFD monitors the distribution, concentration and reliability of the emergency units in service at the unit, fire management zone, first due district and citywide levels. The citywide numbers for 2016 exhibit compliance in all three areas. Distribution, the ability to get our first unit on scene within 6.5 minutes of notification, improved by 2.3%. Concentration, the ability to assemble an effective response force, rose to 94.2%, compared with 83.5% for 2015. Reliability, the ability for a company to answer calls within their own district, decreased slightly to 87.4%.

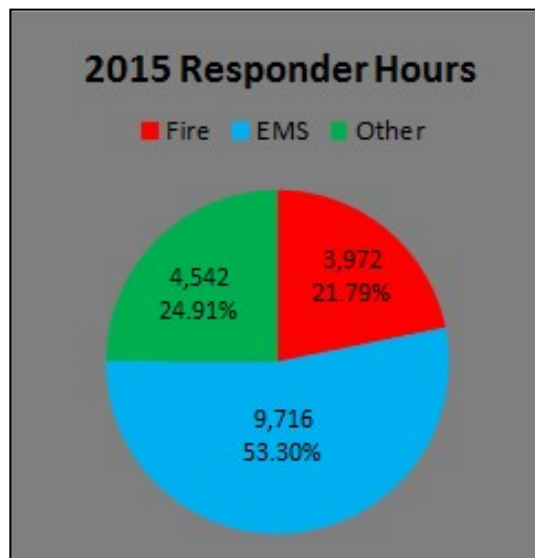
Total Incidents by Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fires	856	716	658	689	648	751	557	580	617	661
Overpressure/Rupture	66	48	46	36	43	36	36	45	43	51
EMS	13,328	13,864	12,649	12,601	13,672	13,749	13,085	13,510	14,792	14,687
Hazardous Conditions	982	1,108	686	747	791	647	1,035	990	898	1,166
Service Call	988	864	1,263	1,653	1,921	2,366	2,037	2,003	1,368	1,492
Good Intent	1,911	1,867	1,970	2,294	2,679	3,193	3,085	3,143	2,976	3,315
False Alarm/Calls	1,494	1,554	1,424	1,581	1,670	1,609	1,579	1,600	1,555	1,774
Severe Weather	2	20	5	16	12	2	3	9	4	14
Special Incident	13	16	8	17	17	19	5	5	3	6
Total	19,640	20,057	18,709	19,634	21,453	22,372	21,422	21,885	22,256	23,166

2016 saw a small downturn (.71%) in the number of EMS incidents, moving from 14,792 to 14,687. This is the first decrease in EMS calls volume since 2013. Rises in hazardous conditions (29.84%), service calls (9.06%), and good intents (11.39%) drove the increase in overall incident numbers. The remainder of the incident types displayed predictable yearly fluctuations.

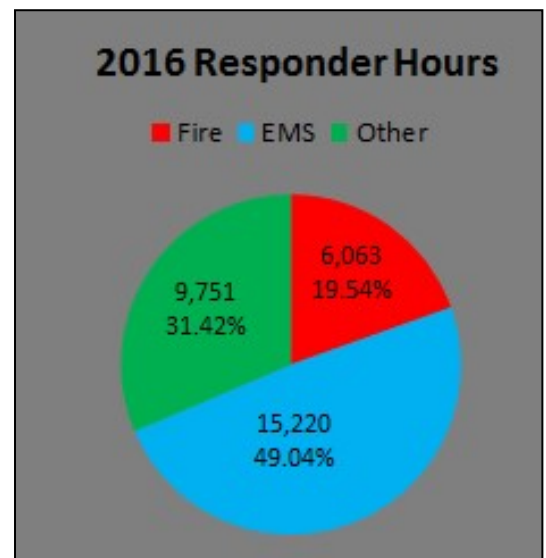


Total Incidents by Type	Numerical Change from 2015 to 2016	Percent Change from 2015 to 2016	Percentage of Total Incidents 2016
Fires	44	7.13%	2.85%
Overpressure/Rupture	8	18.60%	0.22%
EMS	-105	-0.71%	63.40%
Hazardous Conditions	268	29.84%	5.03%
Service Call	124	9.06%	6.44%
Good Intent	339	11.39%	14.31%
False Alarm/Calls	219	14.08%	7.66%
Severe Weather	10	250.00%	0.06%
Special Incident	3	100.00%	0.03%
Total	910	0.00%	100.00%

EMS incidents accounted for 63.40% of the emergency incidents in the city in 2016, and accounted for

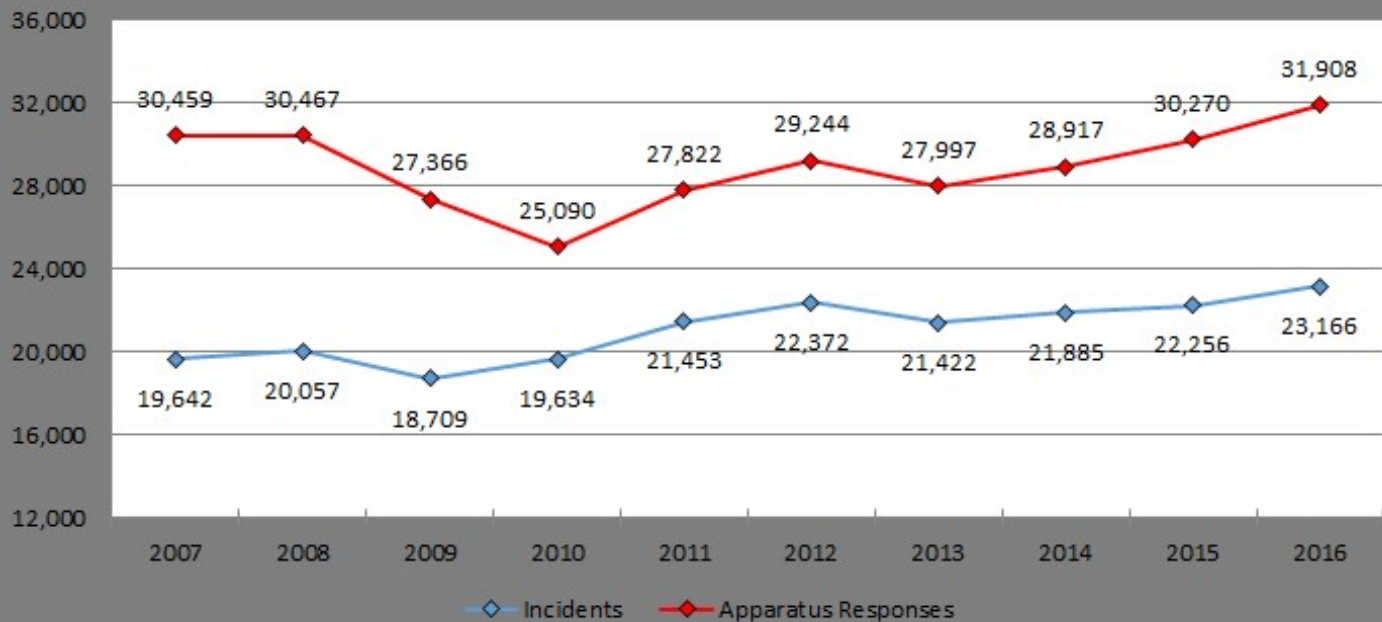


49.04% of the time personnel spent on scene, compared with 53.30% last year. Fires generated only 2.85% of the total incident volume, but required 19.54% of deployed time for effective mitigation, compared with 21.79% last year.



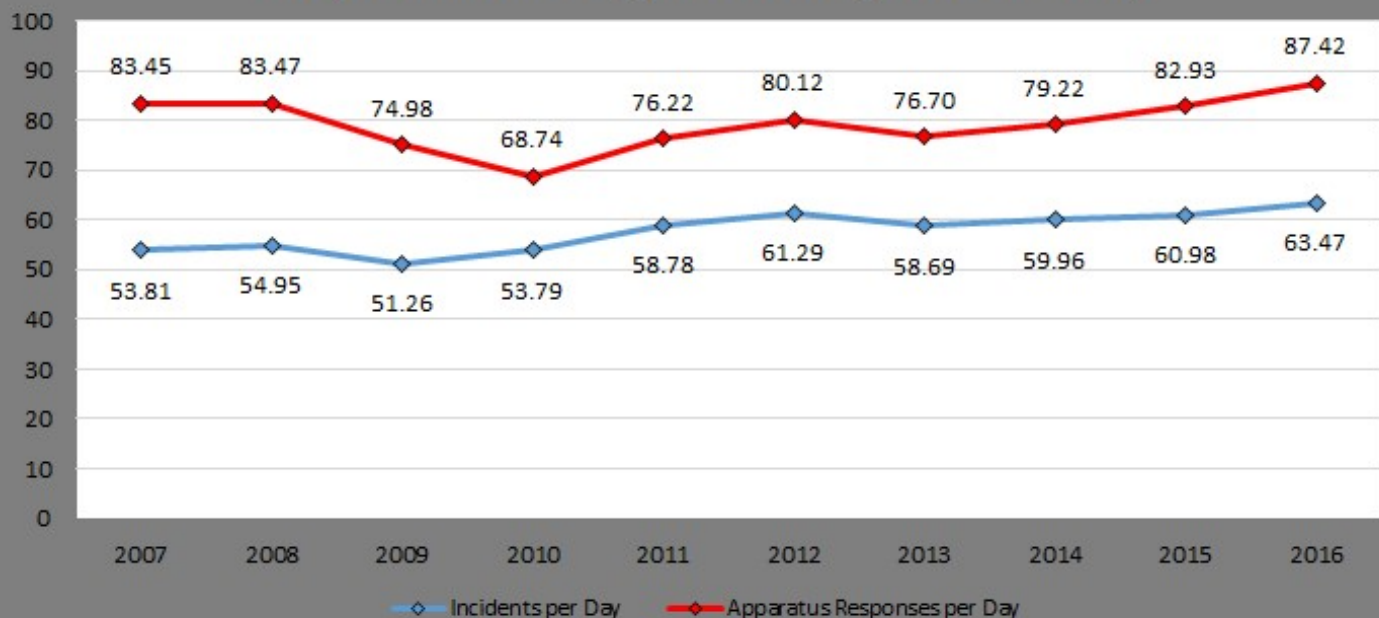
2016 OVERALL PERFORMANCE METRICS

Total Incident & Apparatus Activity Summary

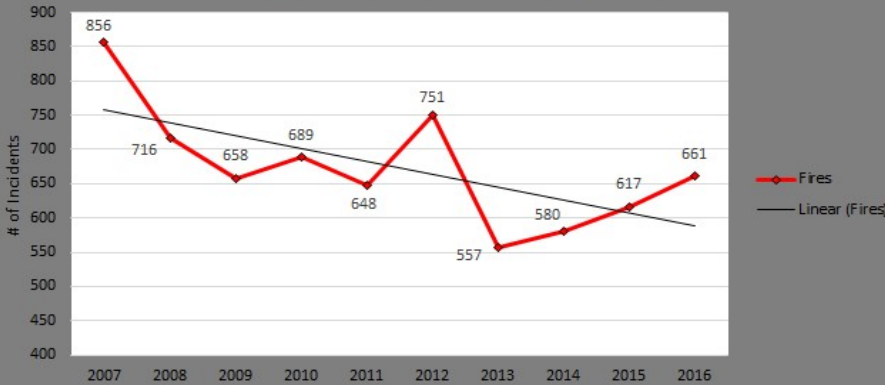


Emergency incident activity grew by 910 in 2016, for an increase of 4.09%. The average daily incident count moved from 60.98 in 2015 to 63.47 in 2016. Apparatus responses rose by 5.41%, to 31,908. These statistics correlate with a pattern of increasing call volumes over the last several years.

Daily Incident & Apparatus Response Activity



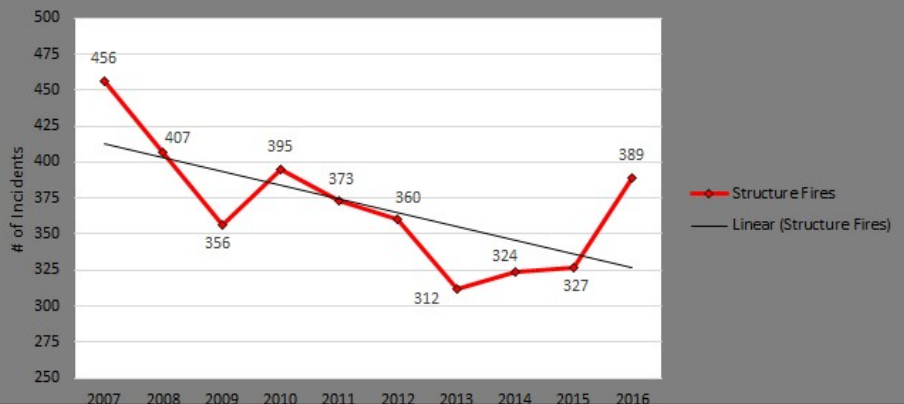
GRFD All Fire Incidents 2007-2016



Total fire incidents (structures, cars, dumpsters, mutual aid, brush, etc.) were at 661 for 2016, a slight increase from 2015, and a continuation of a three year rise in combined fire incidents.

2016 also saw a large increase in structure fires, rising 62 (18.96%) from 327 to 389. This represents the largest single year increase in structure fires in the last decade.

GRFD Structure Fire Incidents 2007-2016



2016 Structure Fires		
# Per Day	Frequency	Total
1	135	135
2	69	138
3	30	90
4	4	16
5	2	10
Total		389

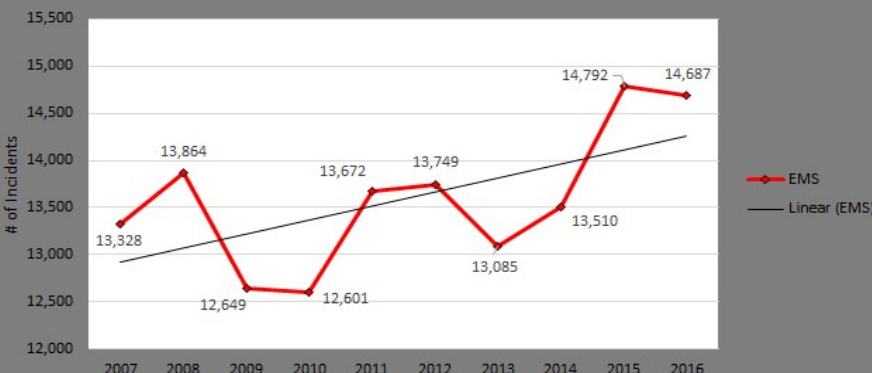
On any particular day in 2016, there was a 65.75% chance of a structure fire occurring somewhere in the city of Grand Rapids. Although the average number of structure fires was just above 1 per day, the city still experiences many days during the year with multiple fires. In 2016 this happened 105 times (28.77% of days). There were also 20 days with simultaneous fires,

requiring twice the typical amount of personnel and equipment to provide positive outcomes for our citizens.

2016 Simultaneous Structure Fires

Description	Count	%
2 Structure Fires at Same Time	18	4.63%
3 Structure Fires at Same Time	2	0.51%
4 Structure Fires at Same Time	0	0%

GRFD Emergency Medical Incidents 2007-2016



2016 saw a slight decrease in the number of EMS incidents, declining 105 calls to 14,687. EMS accounted for 63.40% of the emergency incidents in the city in 2016, a drop of .71% from the 2015 mark of 66.46%.

2016 TEMPORAL ANALYSIS (Depicts time of day/day of week demand)

Temporal Analysis - 2016 All Alarms								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	142	83	79	82	89	102	113	690
01:00-01:59	132	80	67	89	91	82	135	676
02:00-02:59	112	63	91	77	87	88	140	658
03:00-03:59	100	62	66	57	63	68	72	488
04:00-04:59	83	63	77	56	56	64	73	472
05:00-05:59	58	60	72	52	58	56	63	419
06:00-06:59	69	67	89	69	75	78	77	524
07:00-07:59	81	108	101	104	101	105	83	683
08:00-08:59	97	139	153	140	138	115	117	899
09:00-09:59	141	159	152	160	143	154	115	1,024
10:00-10:59	160	151	177	184	189	150	116	1,127
11:00-11:59	148	187	166	173	176	164	151	1,165
12:00-12:59	158	178	181	176	161	166	175	1,195
13:00-13:59	154	183	180	212	185	185	167	1,266
14:00-14:59	149	188	201	204	200	199	164	1,305
15:00-15:59	154	181	194	197	169	216	200	1,311
16:00-16:59	149	186	191	209	213	185	221	1,354
17:00-17:59	160	205	178	204	167	223	226	1,363
18:00-18:59	175	169	150	162	185	180	210	1,231
19:00-19:59	172	157	165	168	160	167	166	1,155
20:00-20:59	169	165	156	170	161	193	174	1,188
21:00-21:59	162	154	149	147	165	162	200	1,139
22:00-22:59	133	133	125	131	140	129	162	953
23:00-23:59	120	106	110	133	114	136	162	881
Total	3,178	3,227	3,270	3,356	3,286	3,367	3,482	23,166

Temporal Analysis - 2016 EMS								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	79	51	45	46	46	68	76	411
01:00-01:59	81	53	39	55	47	48	86	409
02:00-02:59	64	46	52	47	52	47	83	391
03:00-03:59	60	35	37	35	44	38	43	292
04:00-04:59	52	41	53	25	30	43	41	285
05:00-05:59	37	43	49	37	38	43	40	287
06:00-06:59	38	46	48	50	46	62	51	341
07:00-07:59	51	72	66	66	69	72	47	443
08:00-08:59	65	90	96	91	88	79	80	589
09:00-09:59	95	103	105	102	91	100	70	666
10:00-10:59	101	101	122	123	117	110	81	755
11:00-11:59	97	129	109	118	119	111	101	784
12:00-12:59	106	106	128	109	105	111	119	784
13:00-13:59	103	113	120	145	115	113	107	816
14:00-14:59	93	111	121	137	119	122	103	806
15:00-15:59	90	110	126	118	109	135	117	805
16:00-16:59	93	121	121	137	144	118	122	856
17:00-17:59	96	119	119	124	105	125	108	796
18:00-18:59	107	115	88	99	115	99	117	740
19:00-19:59	111	102	114	97	102	112	99	737
20:00-20:59	107	119	105	106	108	120	121	786
21:00-21:59	83	92	106	86	115	106	104	692
22:00-22:59	84	77	83	83	86	79	101	593
23:00-23:59	74	53	69	72	72	77	95	512
Total	1,967	2,048	2,121	2,108	2,082	2,138	2,112	14,576

For 2016, the most active time period for day of the week and hour of the day occurred on Saturdays between 5:00 and 6:00 pm, with 226 calls for service. This is up from the 182 calls experienced during this time period in 2015. Last year's busiest day and hour were Mondays between 6:00 and 7:00 pm.

EMS responses continue to be higher between 9 am and 10 pm, the time period most people are active and awake. This year's busiest hour for EMS calls was on Wednesdays from 1:00 to 2:00 pm, with a total of 145 incidents.

With most fires occurring in residences, it is no surprise that these alarm levels peak in the evenings when people are home from work and school. This year was no exception, with the time period between 5:00 pm and 1:00 am accounting for 43.72% of all fire incidents.

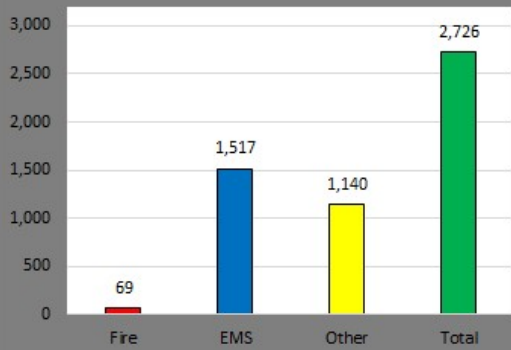
Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	4	6	5	4	6	4	3	32
01:00-01:59	1	1	2	3	0	3	2	12
02:00-02:59	1	2	1	0	5	3	5	17
03:00-03:59	1	3	4	6	0	4	3	21
04:00-04:59	3	2	2	2	1	5	1	16
05:00-05:59	3	1	1	1	0	3	2	11
06:00-06:59	2	1	4	3	1	1	4	16
07:00-07:59	1	1	1	4	1	3	1	12
08:00-08:59	1	2	1	1	5	3	1	14
09:00-09:59	7	4	3	3	2	6	4	29
10:00-10:59	4	3	1	6	4	2	2	22
11:00-11:59	4	4	3	7	2	4	5	29
12:00-12:59	6	5	4	3	2	1	5	26
13:00-13:59	7	6	5	3	4	6	3	34
14:00-14:59	5	5	5	8	6	3	4	36
15:00-15:59	3	7	7	7	3	5	8	40
16:00-16:59	4	4	7	5	6	7	4	37
17:00-17:59	11	7	12	5	3	5	2	45
18:00-18:59	2	4	8	8	8	11	8	49
19:00-19:59	7	5	4	9	3	9	6	43
20:00-20:59	3	4	6	6	5	3	2	29
21:00-21:59	6	5	4	7	4	4	9	39
22:00-22:59	5	7	3	4	2	3	4	28
23:00-23:59	2	2	6	3	2	5	4	24
Total	93	91	99	108	75	103	92	661



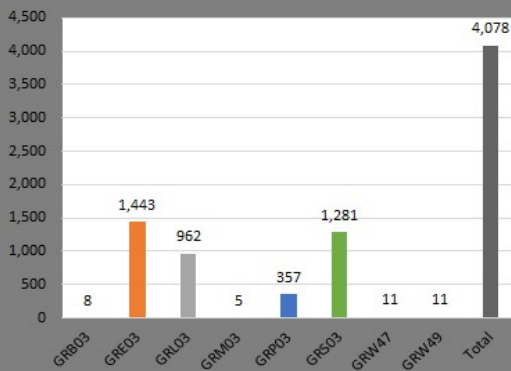
Grand Rapids Fire Department 2016 Mutual Aid Chart						
Location	Mutual aid received	Automatic aid received	Total Received	Mutual aid given	Automatic aid given	Total Given
Algoma Township	0	0	0	1	0	1
Alpine Township	0	0	0	1	0	1
Cannon Township	0	0	0	1	1	2
Grand Rapids Township	2	0	2	1	0	1
Grandville	0	0	0	1	0	1
Kentwood	7	15	22	13	15	28
Plainfield Charter Township	6	22	28	1	24	25
Walker	6	13	19	6	19	25
Wyoming	0	0	0	16	1	17
Total Aid Received			71	Total Aid Given		101

BRIDGE STREET STATION

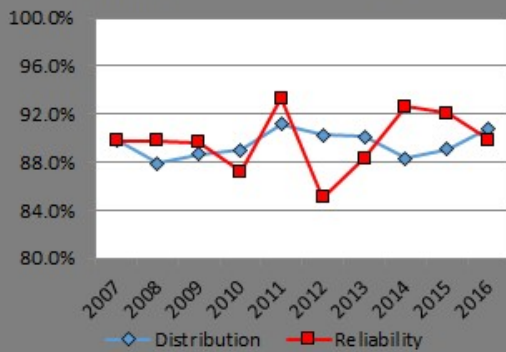
2016 Incidents in District



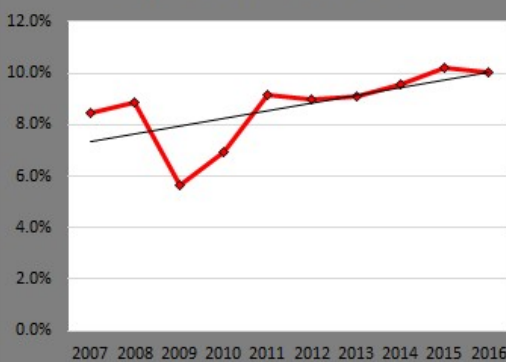
2016 Apparatus Responses



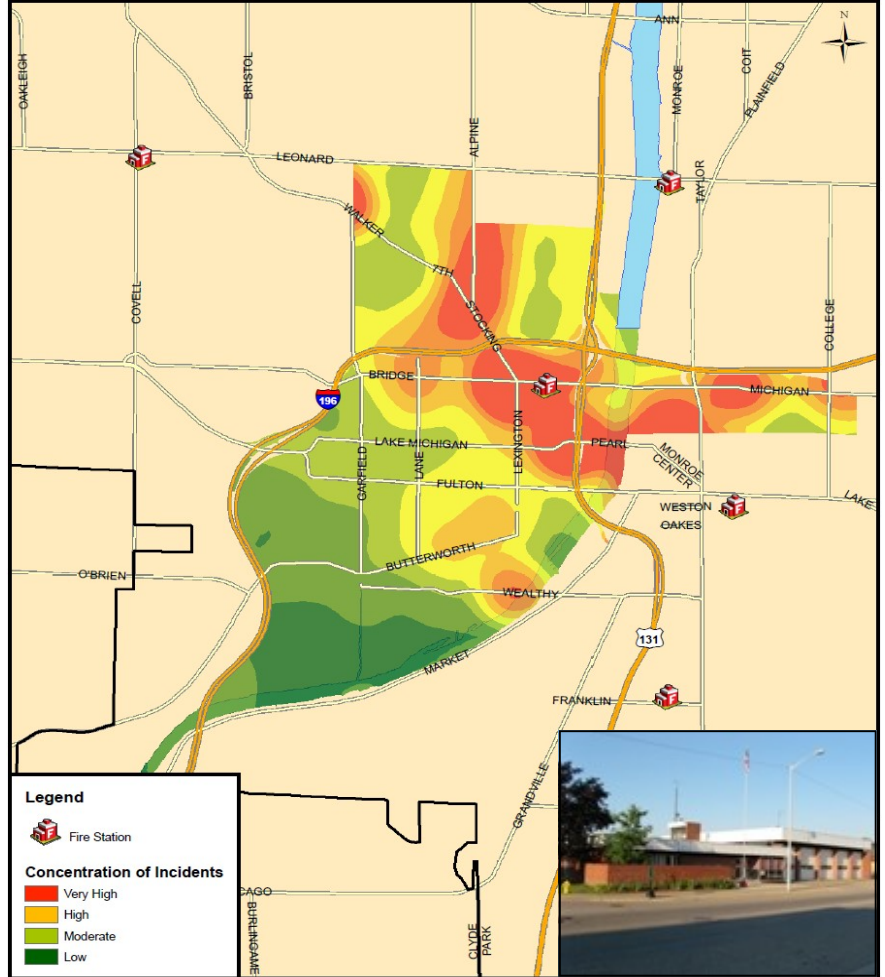
Distribution & Reliability Compliance



Simultaneous Calls



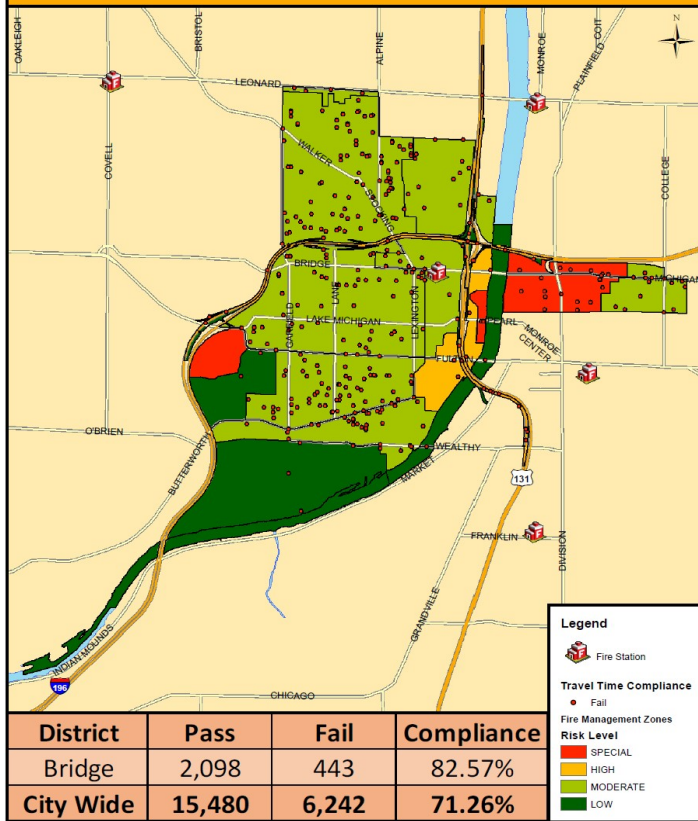
Hot Spot Map of 2016 Incidents



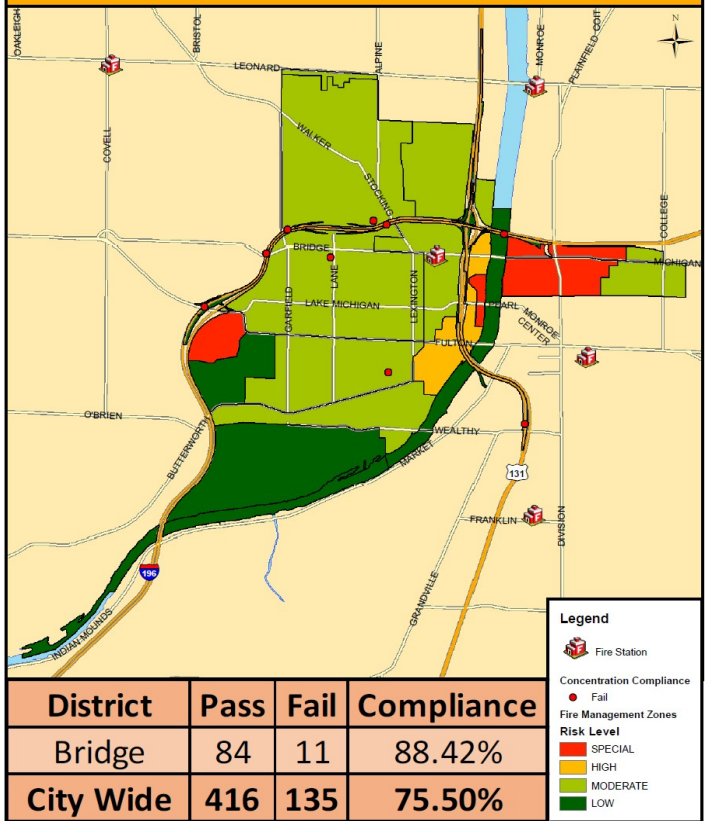
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	11	7	1	4	6	4	6	39	00:00-00:59	0	0	0	1	2	1	1	5
01:00-01:59	10	2	3	3	1	11	7	37	01:00-01:59	0	0	1	0	0	1	0	2
02:00-02:59	8	4	7	4	4	4	6	37	02:00-02:59	1	0	0	0	2	0	0	3
03:00-03:59	6	4	5	4	2	7	3	31	03:00-03:59	0	0	1	2	0	0	0	3
04:00-04:59	3	5	2	2	3	4	6	25	04:00-04:59	1	2	1	1	0	0	0	5
05:00-05:59	6	2	4	5	3	6	5	31	05:00-05:59	0	0	0	0	0	1	0	1
06:00-06:59	2	3	4	3	4	4	4	24	06:00-06:59	0	0	0	0	0	1	1	2
07:00-07:59	3	7	4	3	4	3	3	27	07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	6	8	14	7	10	5	5	55	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	9	5	16	8	11	11	13	73	09:00-09:59	1	1	1	0	0	0	0	3
10:00-10:59	7	12	12	15	13	10	8	77	10:00-10:59	0	0	0	1	0	0	1	2
11:00-11:59	12	9	14	13	17	15	18	98	11:00-11:59	0	1	1	1	0	0	1	4
12:00-12:59	14	11	14	6	7	10	20	82	12:00-12:59	1	0	1	0	0	0	1	3
13:00-13:59	11	9	16	16	16	12	14	94	13:00-13:59	1	1	0	0	0	0	0	2
14:00-14:59	9	13	12	13	19	9	13	88	14:00-14:59	0	1	0	0	3	0	0	4
15:00-15:59	14	13	14	16	14	9	10	90	15:00-15:59	0	1	1	0	0	0	1	3
16:00-16:59	9	13	7	18	16	14	16	93	16:00-16:59	0	0	1	0	1	0	0	2
17:00-17:59	15	13	11	20	13	14	8	94	17:00-17:59	1	0	1	0	0	1	0	3
18:00-18:59	11	12	12	9	11	16	10	81	18:00-18:59	0	0	1	1	0	3	1	6
19:00-19:59	3	11	14	14	17	7	14	80	19:00-19:59	1	0	0	1	0	0	1	3
20:00-20:59	10	15	10	12	20	10	13	90	20:00-20:59	0	0	1	1	0	1	0	3
21:00-21:59	9	9	6	9	12	14	11	70	21:00-21:59	0	1	0	0	0	0	1	2
22:00-22:59	7	8	9	6	10	10	7	57	22:00-22:59	0	2	0	1	0	1	0	4
23:00-23:59	5	3	8	5	7	10	6	44	23:00-23:59	0	0	1	0	0	0	3	4
Total	200	198	219	215	240	219	226	1,517	Total	7	10	12	10	8	10	12	69

BRIDGE STREET STATION

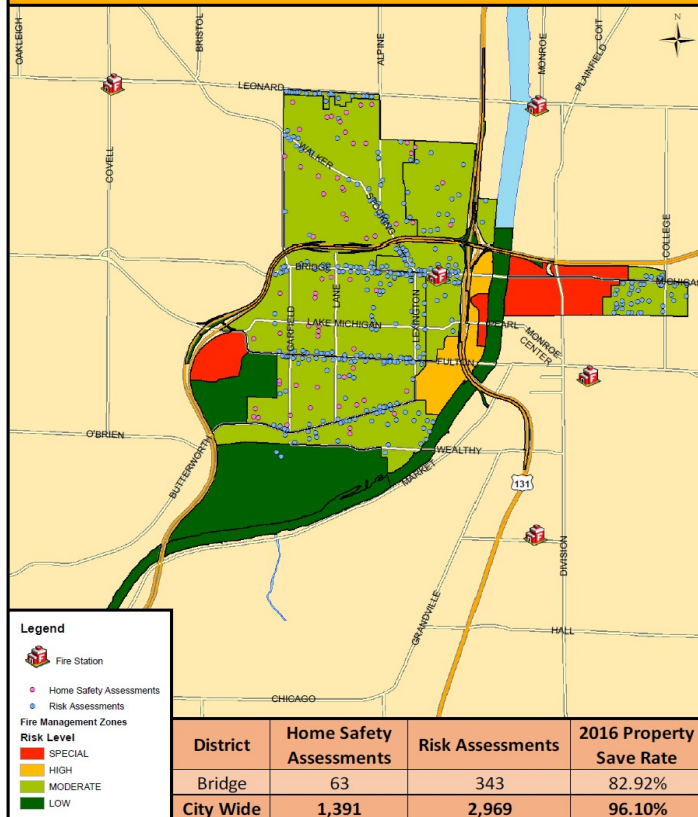
4 Minute Travel Compliance



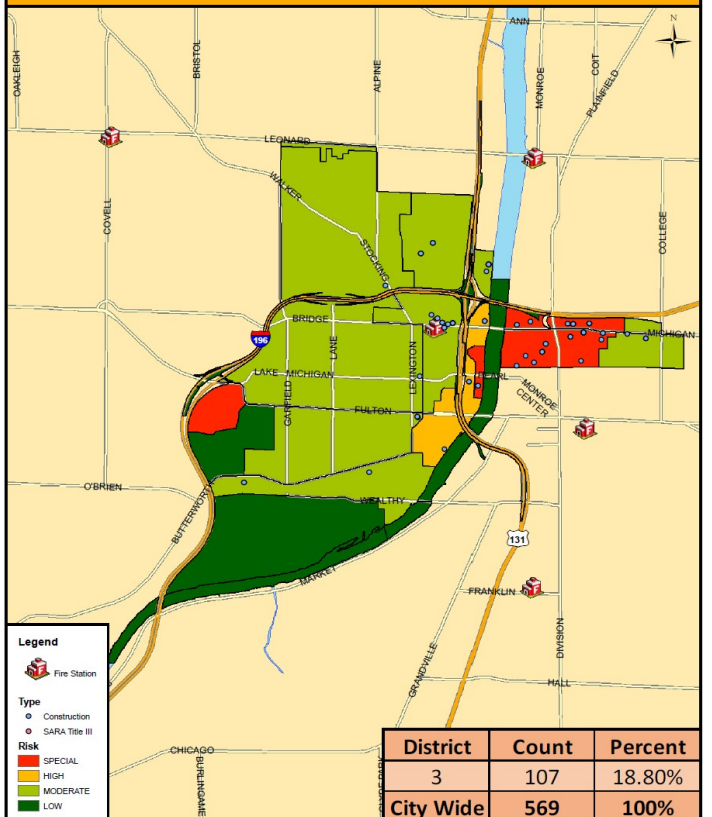
Effective Response Force Compliance



Community Risk Reduction Evaluation

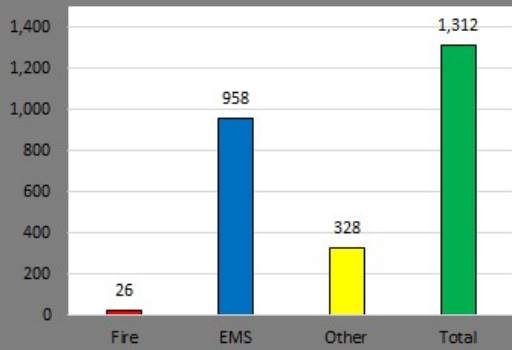


Commercial Development

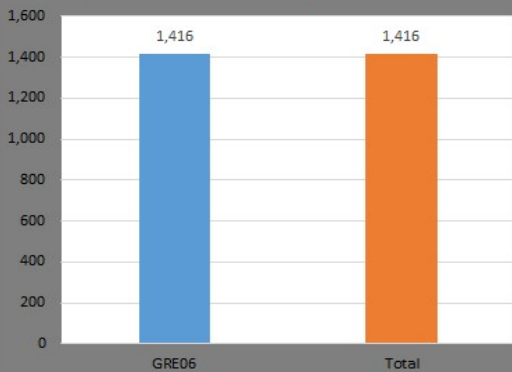


BURTON STREET STATION

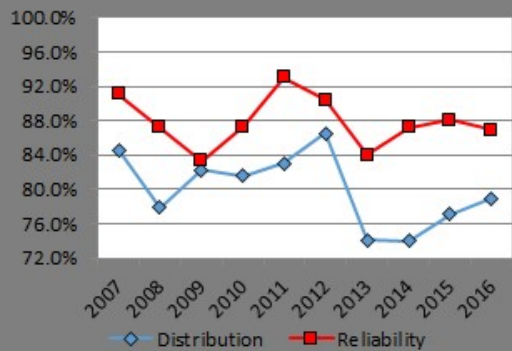
2016 Incidents in District



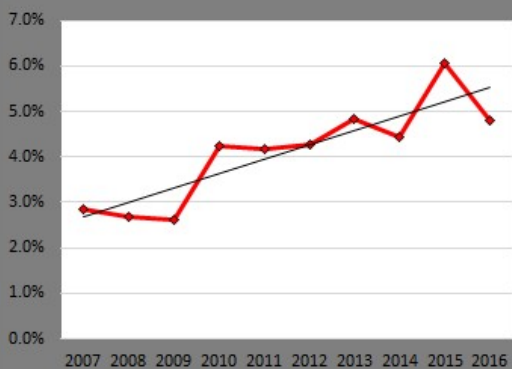
2016 Apparatus Responses



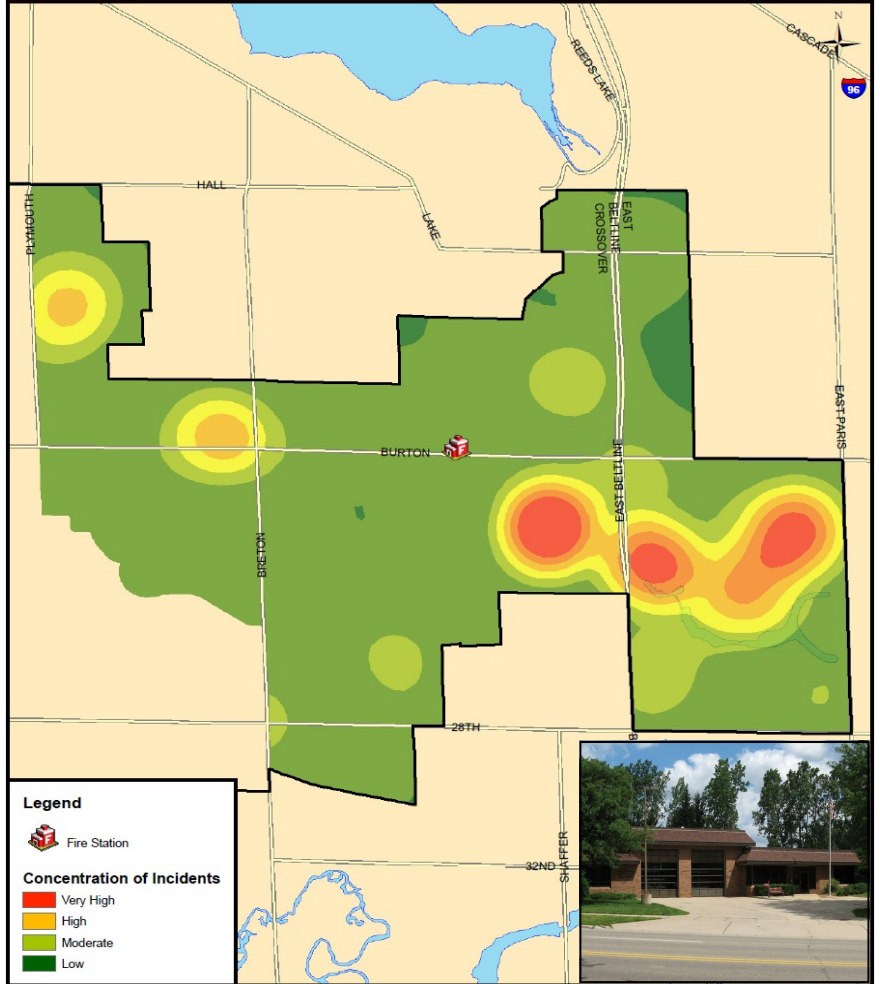
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2016 Incidents



Temporal Analysis - 2016 EMS

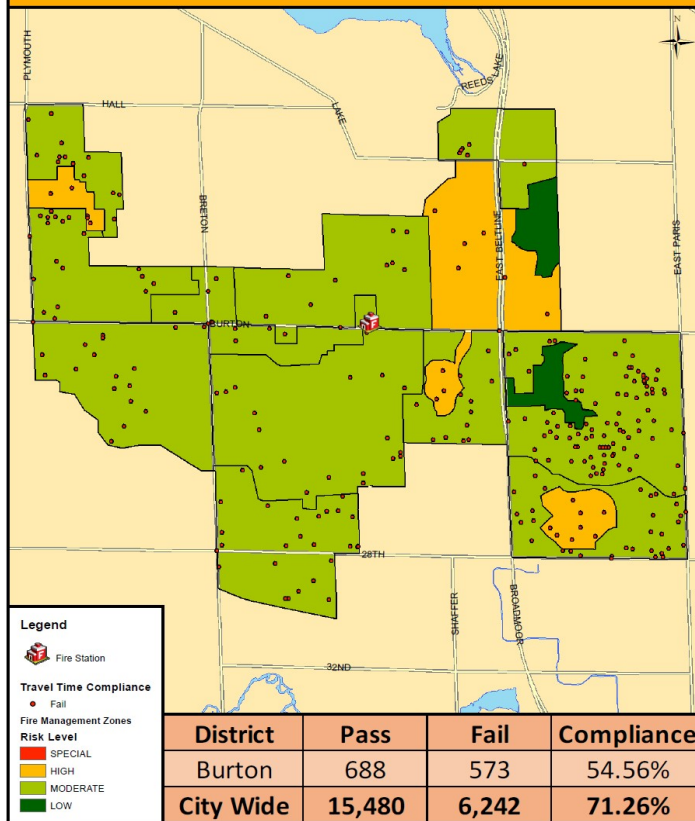
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	5	4	1	3	3	2	4	22
01:00-01:59	2	4	2	5	2	2	10	27
02:00-02:59	4	3	2	3	3	1	5	21
03:00-03:59	5	1	1	2	2	3	3	17
04:00-04:59	6	1	3	1	2	4	1	18
05:00-05:59	2	3	1	4	2	3	3	18
06:00-06:59	2	2	4	5	5	6	2	26
07:00-07:59	3	6	4	7	2	4	0	26
08:00-08:59	12	12	8	8	8	5	4	57
09:00-09:59	15	9	10	6	5	3	2	50
10:00-10:59	10	8	7	6	10	6	11	58
11:00-11:59	7	11	8	9	7	3	11	56
12:00-12:59	5	10	10	6	7	5	7	50
13:00-13:59	9	8	11	8	10	5	11	62
14:00-14:59	6	3	9	12	5	11	9	55
15:00-15:59	0	6	11	10	9	8	7	51
16:00-16:59	4	9	2	8	8	7	6	44
17:00-17:59	7	9	10	9	8	11	7	61
18:00-18:59	8	8	7	4	8	9	10	54
19:00-19:59	3	5	9	7	4	9	3	40
20:00-20:59	13	5	7	7	8	7	6	53
21:00-21:59	3	4	4	4	5	8	4	32
22:00-22:59	5	4	4	5	4	7	10	39
23:00-23:59	1	2	1	9	4	2	2	21
Total	137	137	136	148	131	131	138	958

Temporal Analysis - 2016 Fire

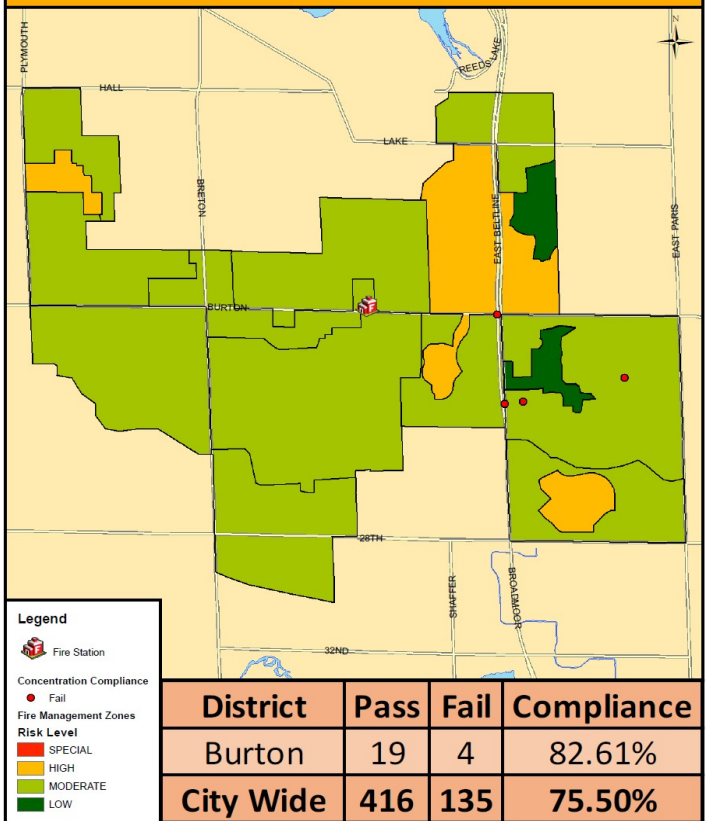
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	1	0	0	0	0	1
01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	1	0	0	0	0	0	0	1
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	1	0	0	0	0	0	0	1
11:00-11:59	1	0	0	0	0	0	0	1
12:00-12:59	0	0	1	0	0	0	0	1
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	0	0	0	0	0	0	2	2
15:00-15:59	1	0	0	2	0	0	0	3
16:00-16:59	1	0	0	1	0	1	0	3
17:00-17:59	1	0	1	1	0	0	0	3
18:00-18:59	0	1	0	1	0	0	0	2
19:00-19:59	1	2	0	0	0	0	0	3
20:00-20:59	1	0	0	0	0	1	0	2
21:00-21:59	2	0	0	0	0	0	0	2
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	1	0	0	0	1
Total	10	3	3	6	0	2	2	26

BURTON STREET STATION

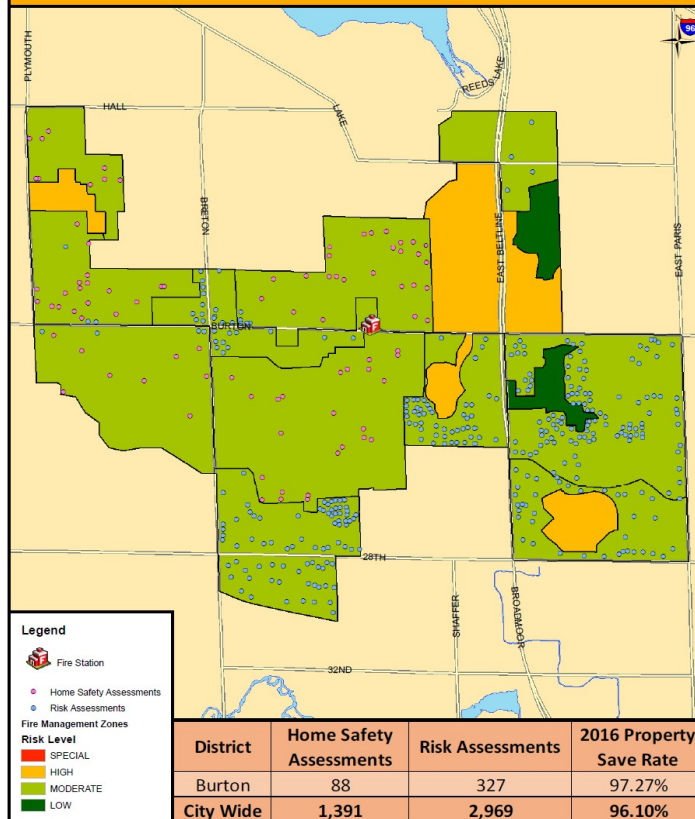
4 Minute Travel Compliance



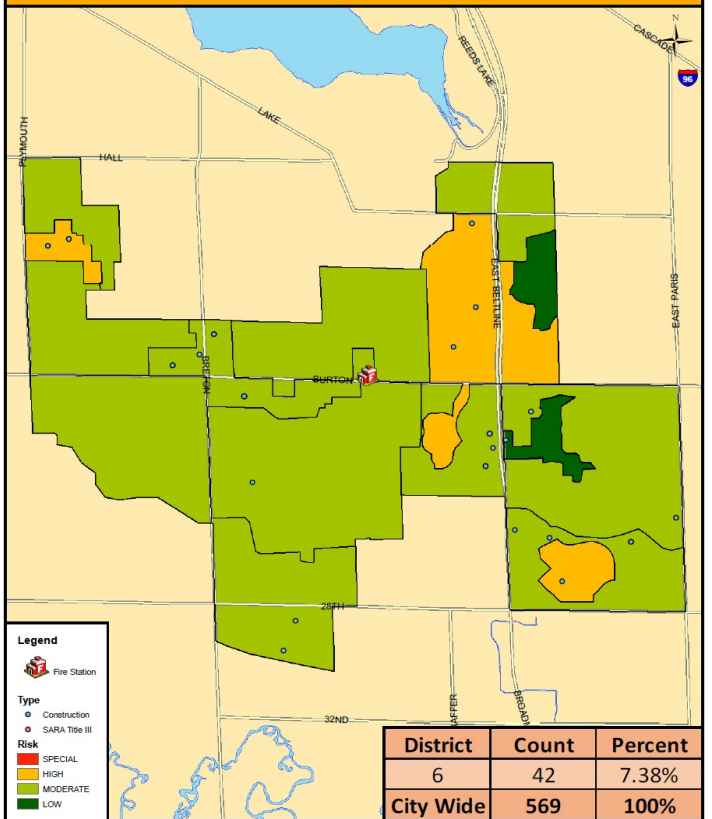
Effective Response Force Compliance



Community Risk Reduction Evaluation

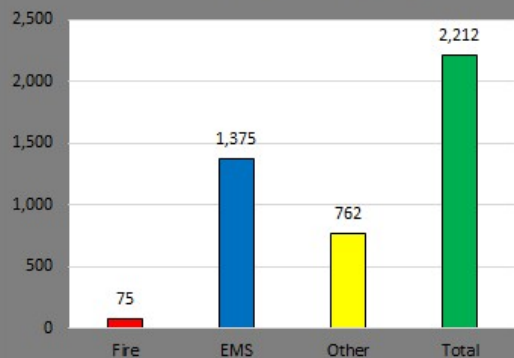


Commercial Development

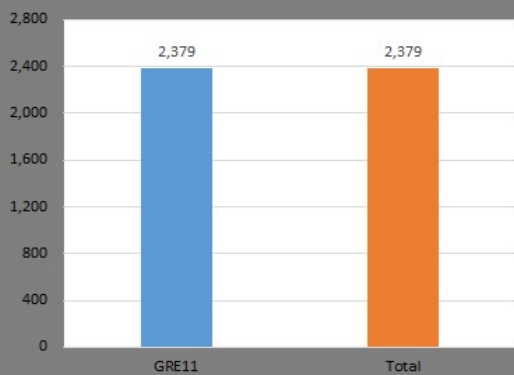


CHESTER STREET STATION

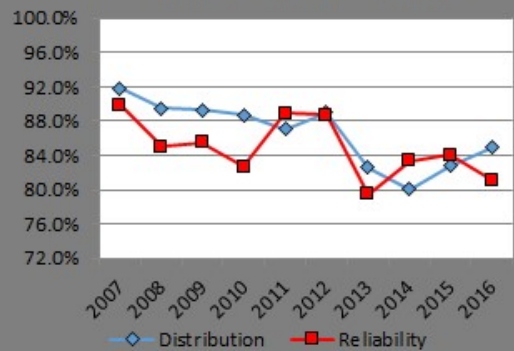
2016 Incidents in District



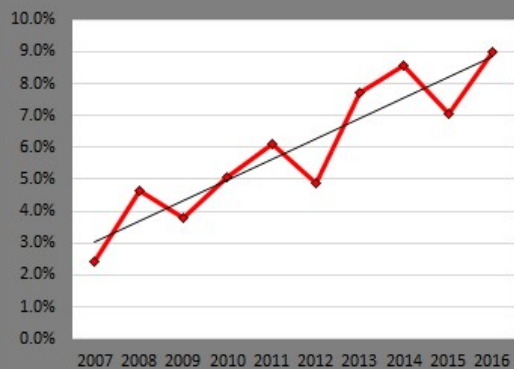
2016 Apparatus Responses



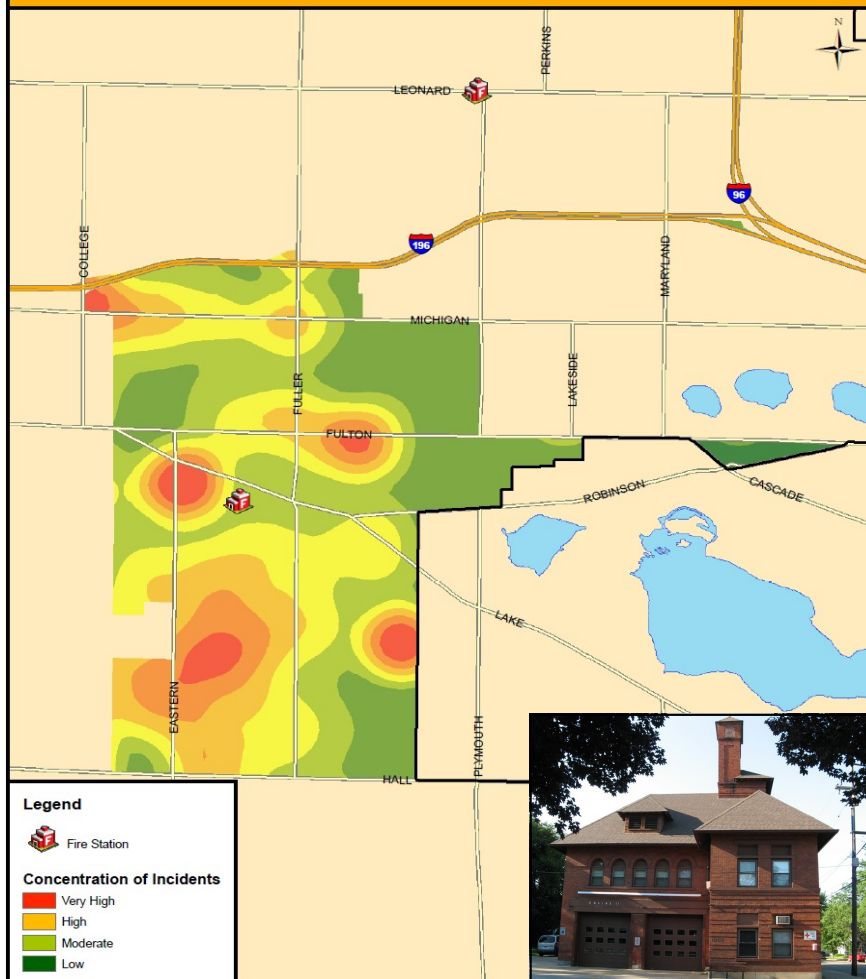
Distribution & Reliability Compliance



Simultaneous Calls



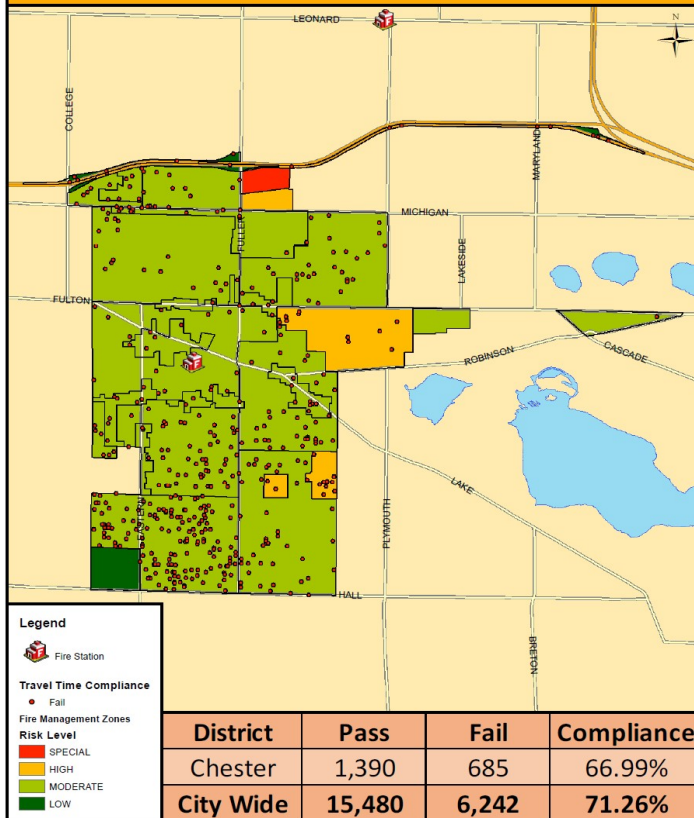
Hot Spot Map of 2016 Incidents



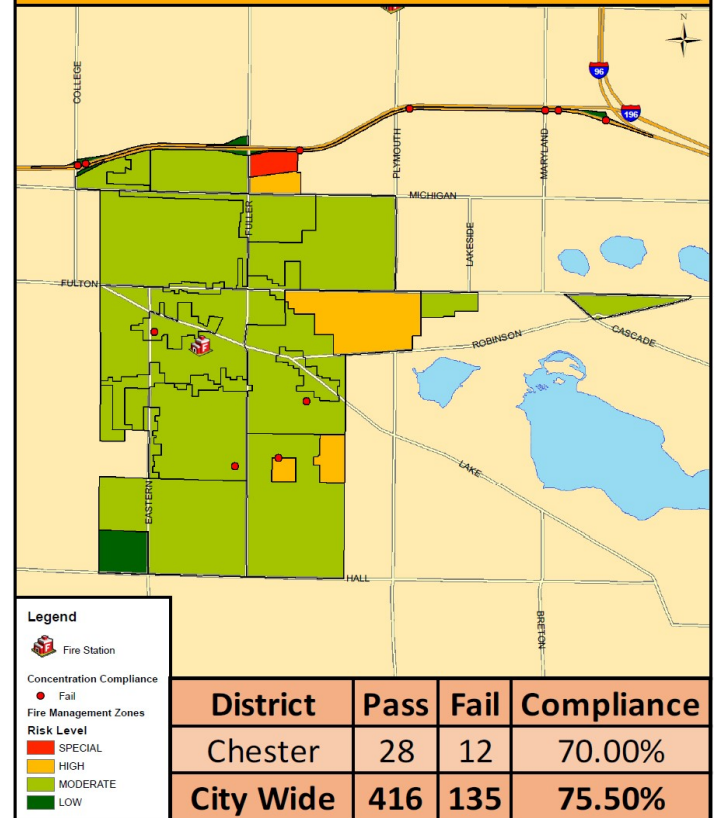
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	7	3	6	7	2	12	6	43	00:00-00:59	1	0	1	1	1	0	0	4
01:00-01:59	11	5	6	9	3	2	6	42	01:00-01:59	1	0	0	0	0	0	0	1
02:00-02:59	6	5	4	3	6	4	8	36	02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	4	4	4	2	5	1	6	26	03:00-03:59	0	0	0	1	0	0	0	1
04:00-04:59	4	1	5	1	3	5	6	25	04:00-04:59	0	0	0	0	0	1	0	1
05:00-05:59	3	4	4	4	4	9	7	35	05:00-05:59	0	0	0	0	0	0	1	1
06:00-06:59	5	5	4	5	7	5	5	36	06:00-06:59	0	0	1	0	0	0	0	1
07:00-07:59	9	6	7	9	7	13	9	60	07:00-07:59	0	0	0	0	0	1	0	1
08:00-08:59	4	8	6	8	5	6	7	44	08:00-08:59	0	1	0	0	2	1	0	4
09:00-09:59	7	10	9	12	15	11	2	66	09:00-09:59	2	0	0	1	1	1	3	8
10:00-10:59	9	13	11	13	13	11	6	76	10:00-10:59	0	0	0	0	1	0	0	1
11:00-11:59	6	13	10	14	11	7	14	75	11:00-11:59	0	0	0	3	0	0	0	3
12:00-12:59	11	8	16	11	8	12	8	74	12:00-12:59	0	1	1	0	1	0	0	3
13:00-13:59	4	8	17	18	14	17	4	82	13:00-13:59	0	0	1	0	0	0	1	2
14:00-14:59	6	10	11	14	7	11	6	65	14:00-14:59	2	0	0	1	1	0	0	4
15:00-15:59	6	10	13	12	6	13	16	76	15:00-15:59	0	3	2	1	2	1	0	9
16:00-16:59	6	12	14	15	13	16	7	83	16:00-16:59	0	2	2	0	0	1	0	5
17:00-17:59	6	13	13	9	8	10	11	70	17:00-17:59	1	1	1	0	1	0	0	4
18:00-18:59	11	11	4	7	11	7	11	62	18:00-18:59	0	1	0	1	0	1	2	5
19:00-19:59	12	6	7	8	7	6	7	53	19:00-19:59	0	0	1	1	0	1	0	3
20:00-20:59	7	9	12	14	7	3	9	61	20:00-20:59	0	0	0	0	2	0	0	2
21:00-21:59	6	6	11	9	12	13	6	63	21:00-21:59	1	0	0	1	1	0	0	3
22:00-22:59	11	7	10	8	11	3	14	64	22:00-22:59	1	0	1	2	1	0	1	6
23:00-23:59	8	3	10	5	8	10	14	58	23:00-23:59	0	1	2	0	0	0	0	3
Total	169	180	214	217	193	207	195	1,375	Total	9	10	13	13	14	8	8	75

CHESTER STREET STATION

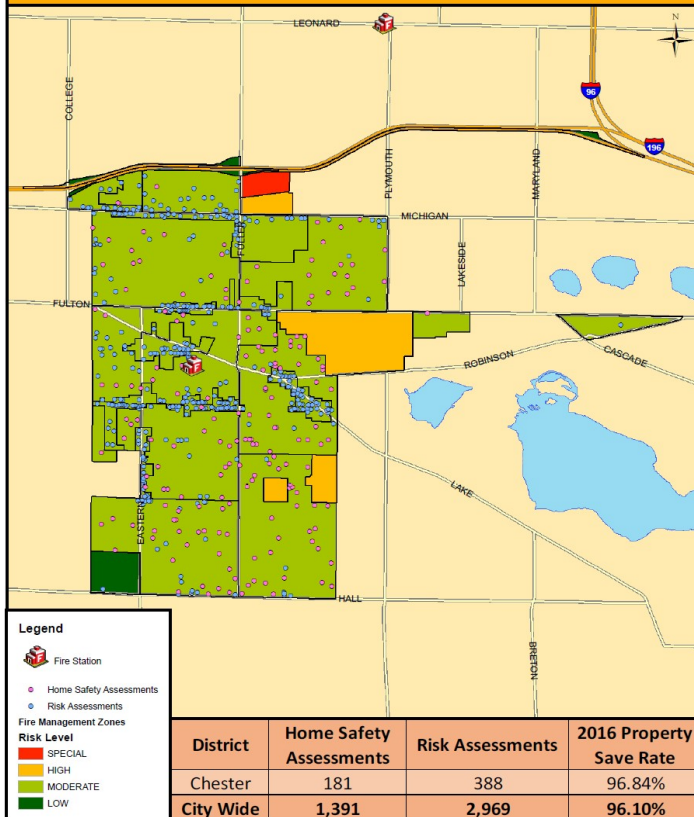
4 Minute Travel Compliance



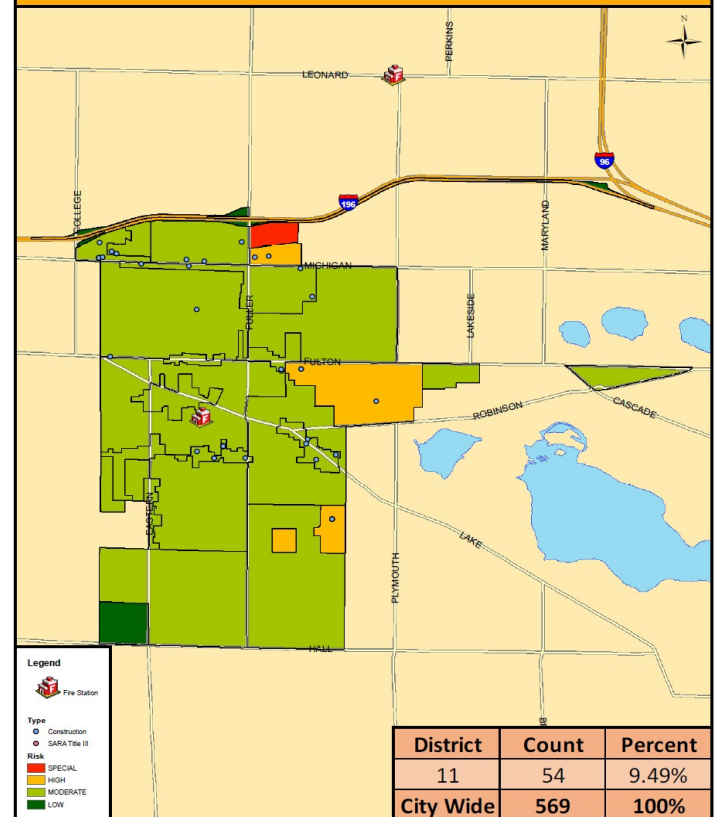
Effective Response Force Compliance



Community Risk Reduction Evaluation

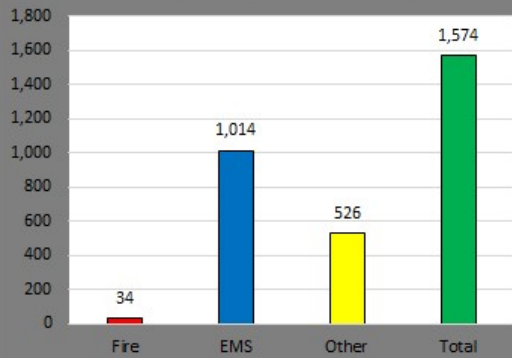


Commercial Development

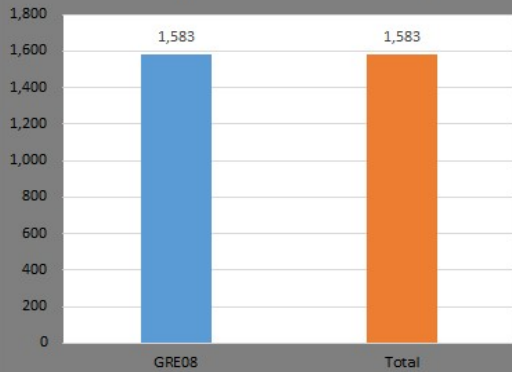


COVELL AVENUE STATION

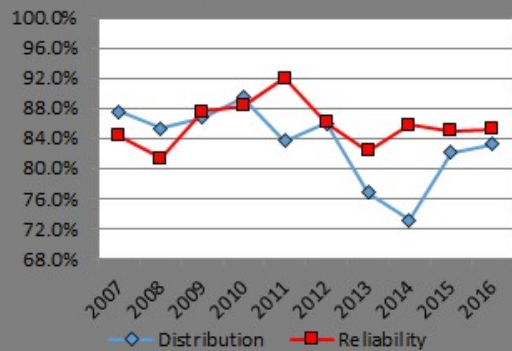
2016 Incidents in District



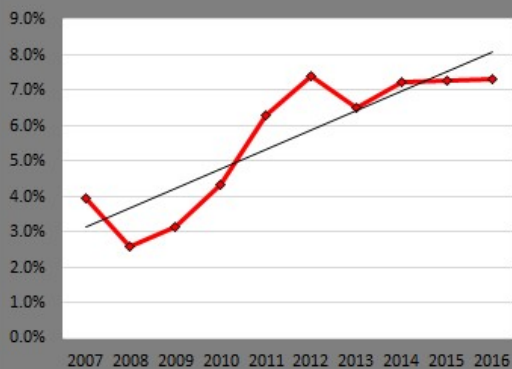
2016 Apparatus Responses



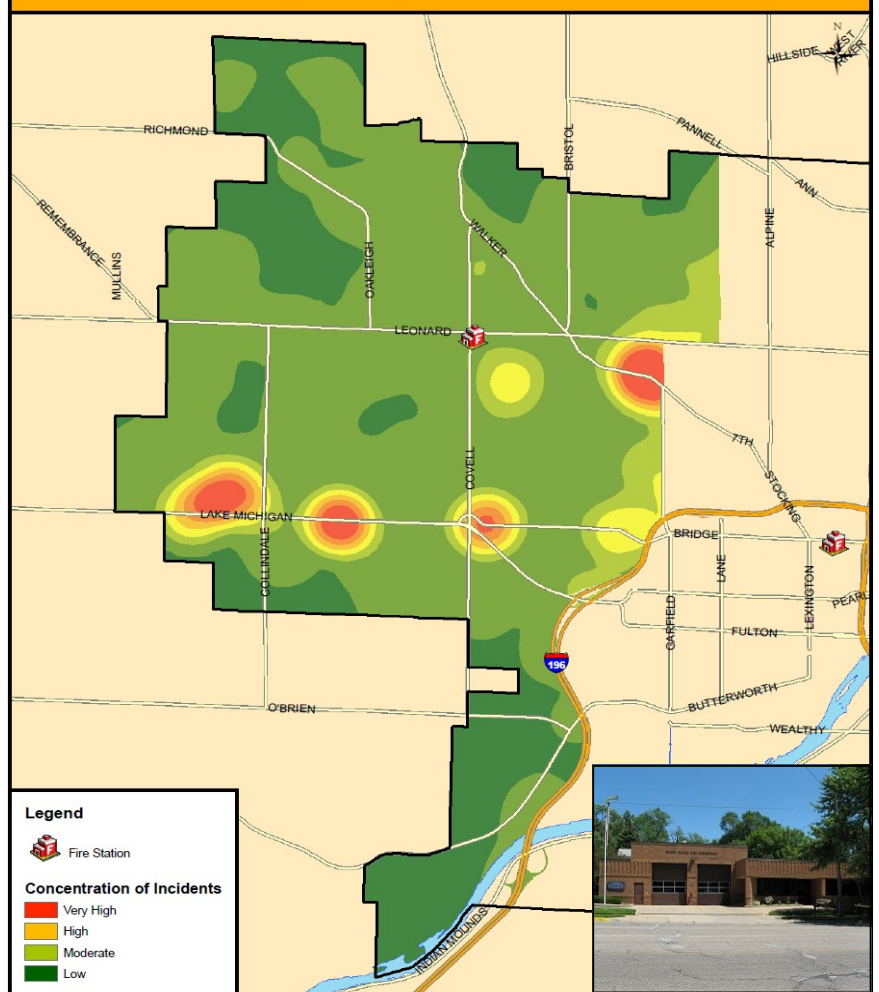
Distribution & Reliability Compliance



Simultaneous Calls



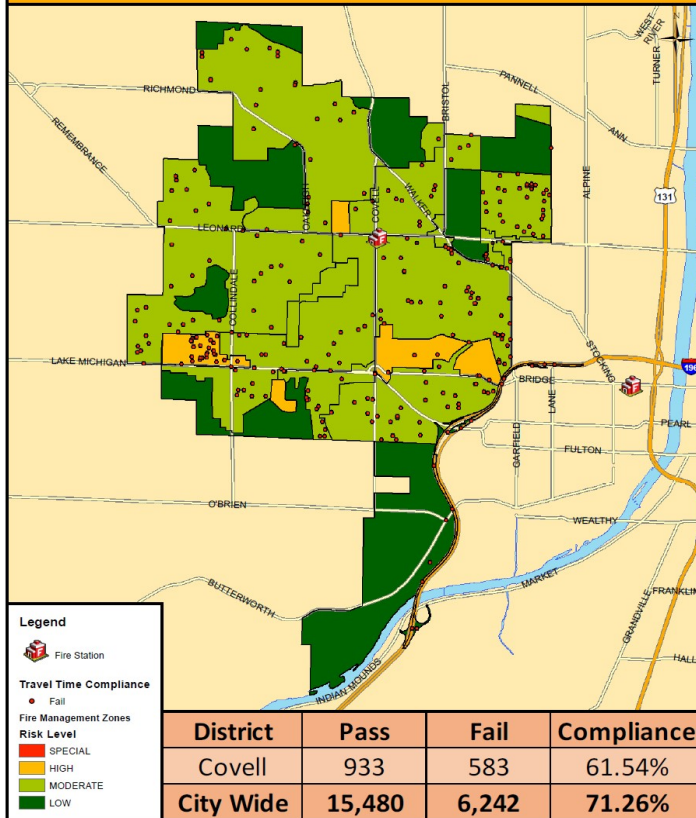
Hot Spot Map of 2016 Incidents



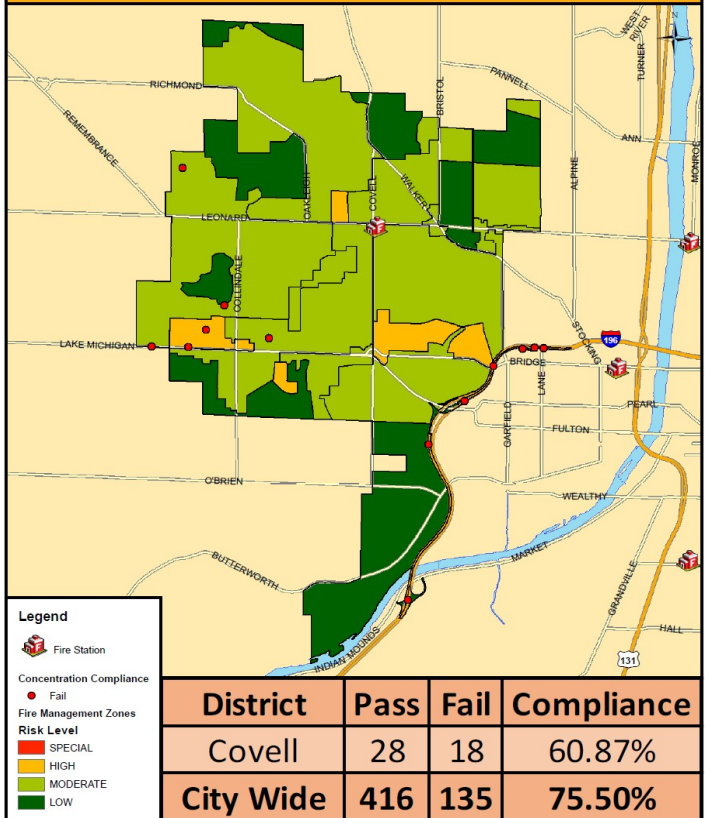
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	3	3	1	4	3	1	4	19	00:00-00:59	1	0	0	0	0	0	1	2
01:00-01:59	2	2	2	2	2	5	6	21	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	6	5	0	3	3	4	5	26	02:00-02:59	0	1	0	0	0	0	0	1
03:00-03:59	5	2	2	2	3	1	3	18	03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	3	5	10	2	1	3	2	26	04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	1	3	3	2	2	4	3	18	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	4	2	5	6	3	1	3	24	06:00-06:59	1	0	1	1	0	0	0	3
07:00-07:59	7	3	10	5	12	8	6	51	07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	13	7	2	8	8	10	7	55	08:00-08:59	0	0	0	0	0	0	1	1
09:00-09:59	14	7	4	7	12	8	10	62	09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	8	6	11	8	9	7	6	55	10:00-10:59	1	0	0	0	0	1	1	3
11:00-11:59	5	15	7	10	5	8	6	56	11:00-11:59	1	0	0	0	0	0	0	1
12:00-12:59	7	12	7	6	9	8	6	55	12:00-12:59	0	0	1	0	0	0	2	3
13:00-13:59	14	10	6	5	6	9	5	55	13:00-13:59	0	0	0	0	1	2	0	3
14:00-14:59	4	13	6	7	9	4	4	47	14:00-14:59	0	0	1	0	0	1	0	2
15:00-15:59	9	8	8	5	8	9	8	55	15:00-15:59	0	0	0	0	0	0	0	0
16:00-16:59	8	9	8	13	12	4	4	58	16:00-16:59	0	0	2	0	1	0	0	3
17:00-17:59	4	6	10	7	8	10	4	49	17:00-17:59	1	0	0	0	0	1	0	2
18:00-18:59	8	9	4	7	8	5	7	48	18:00-18:59	1	0	1	1	0	1	1	5
19:00-19:59	7	8	7	2	4	5	8	41	19:00-19:59	0	0	0	0	0	1	1	2
20:00-20:59	6	7	6	5	5	5	6	40	20:00-20:59	0	0	1	0	0	0	0	1
21:00-21:59	8	8	7	3	6	7	4	43	21:00-21:59	0	0	0	1	0	0	1	2
22:00-22:59	5	8	6	10	8	3	6	46	22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	8	8	6	5	5	6	8	46	23:00-23:59	0	0	0	0	0	0	0	0
Total	159	166	138	134	151	135	131	1,014	Total	6	1	7	3	2	7	8	34

COVELL AVENUE STATION

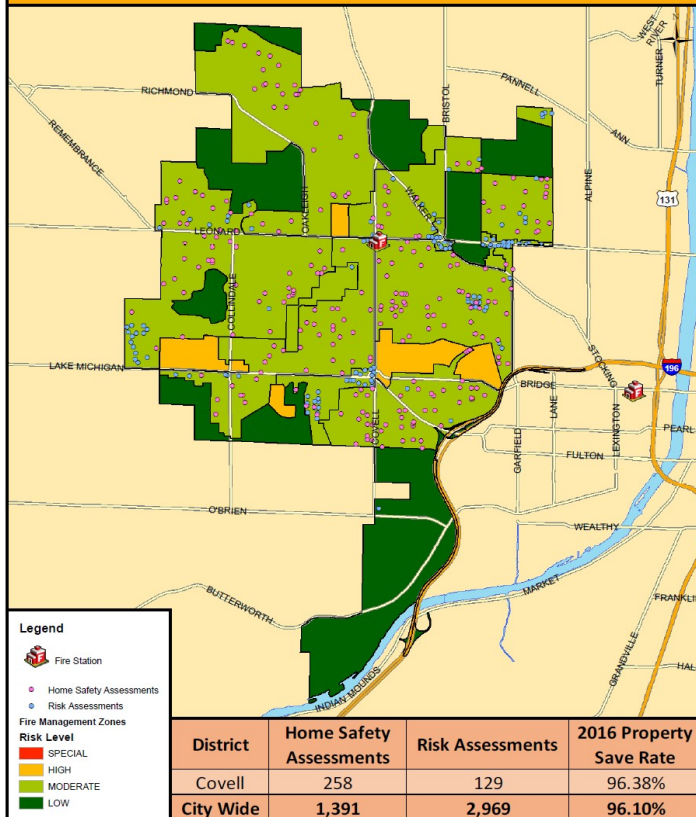
4 Minute Travel Compliance



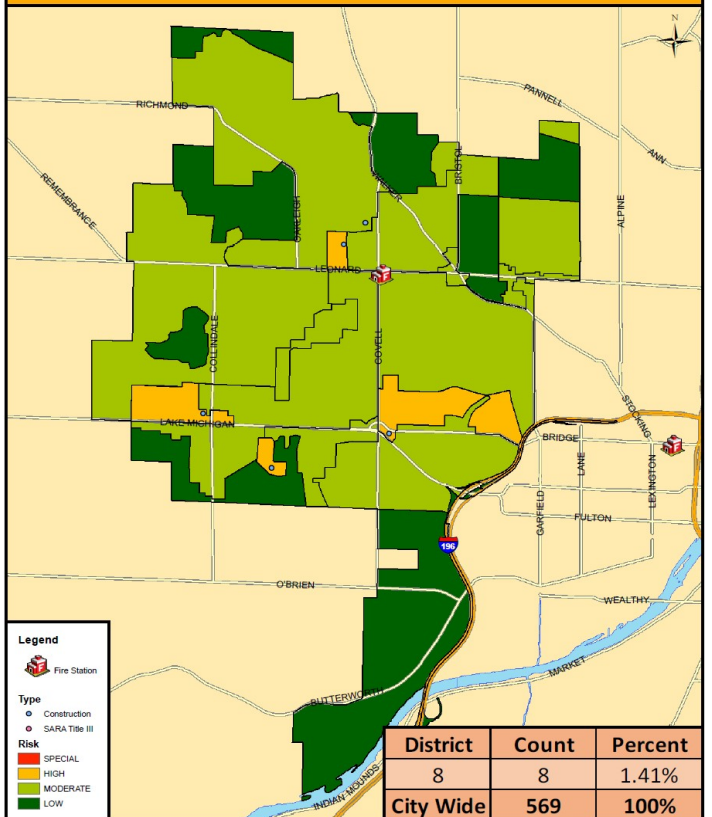
Effective Response Force Compliance



Community Risk Reduction Evaluation

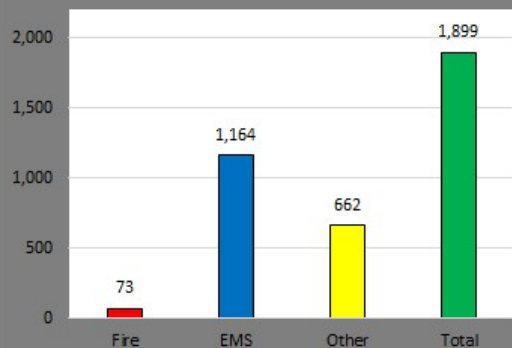


Commercial Development

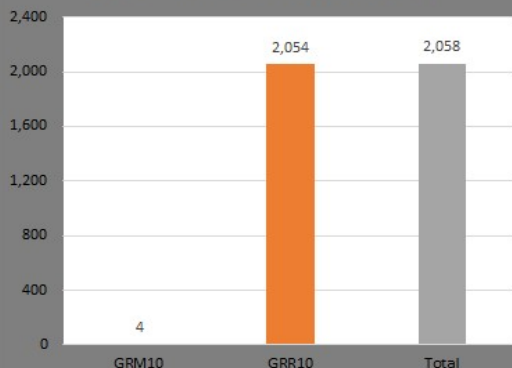


DIVISION AVENUE STATION

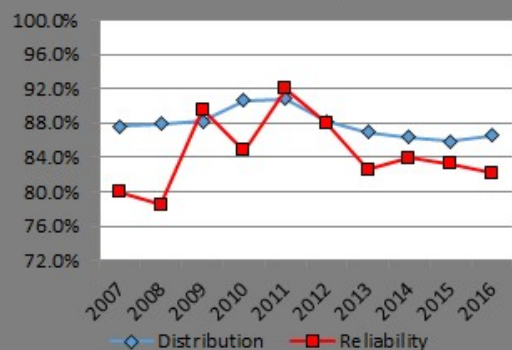
2016 Incidents in District



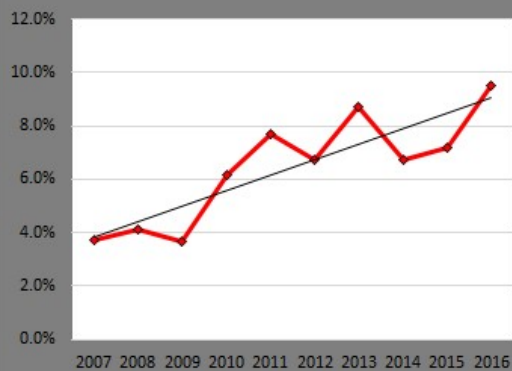
2016 Apparatus Responses



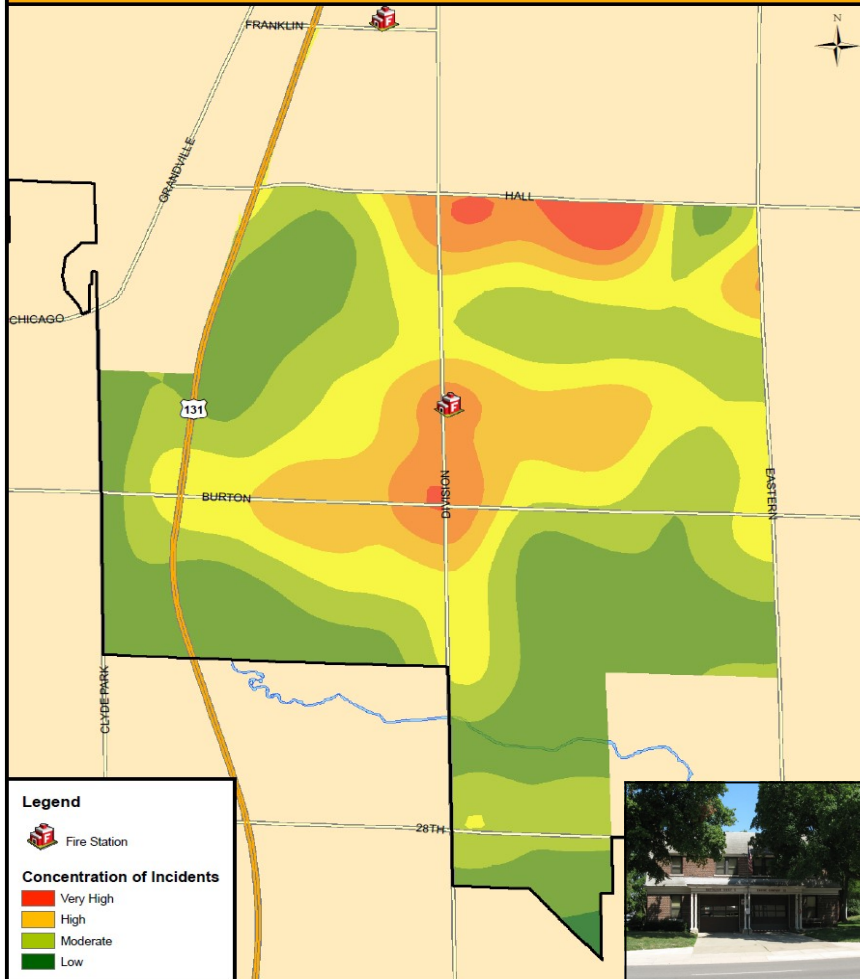
Distribution & Reliability Compliance



Simultaneous Calls



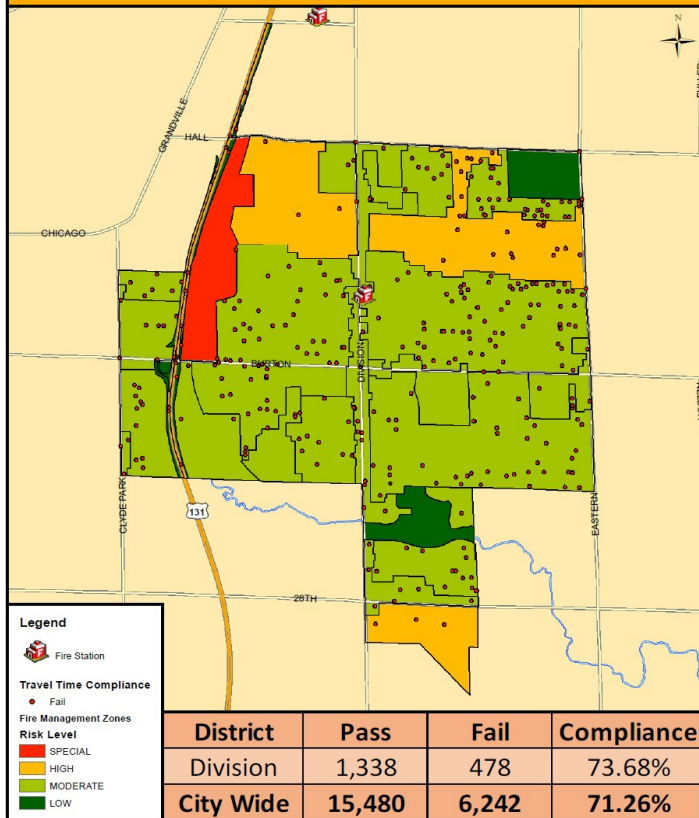
Hot Spot Map of 2016 Incidents



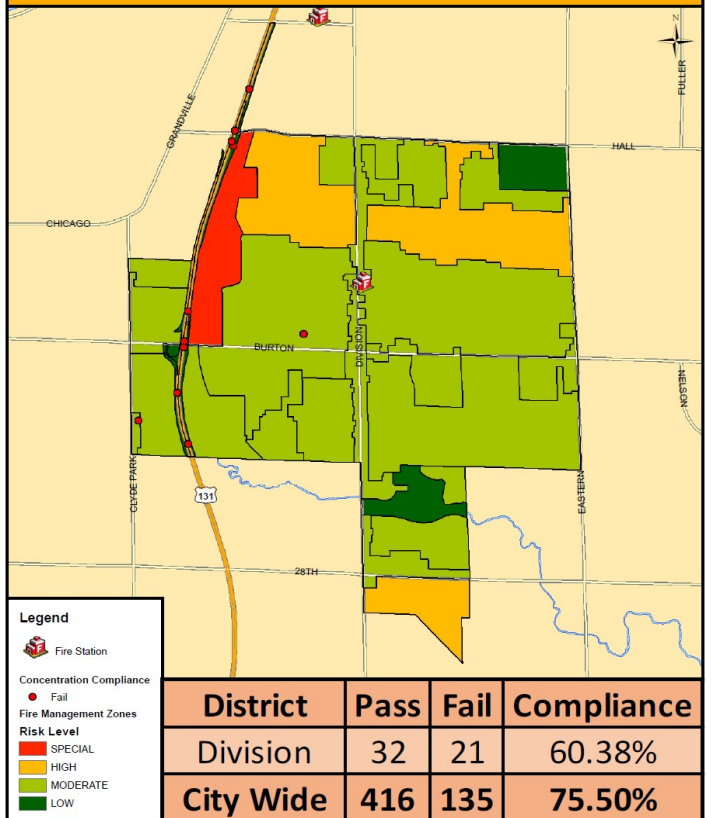
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	10	3	4	8	3	4	4	36	00:00-00:59	0	1	0	1	0	0	1	3
01:00-01:59	10	3	3	3	4	6	10	39	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	2	6	5	3	6	5	10	37	02:00-02:59	0	0	0	0	1	0	0	1
03:00-03:59	8	2	2	2	5	5	7	31	03:00-03:59	1	1	1	0	0	0	0	3
04:00-04:59	7	3	3	1	3	7	5	29	04:00-04:59	1	0	0	0	1	1	0	3
05:00-05:59	2	5	8	3	3	4	3	28	05:00-05:59	0	0	0	0	0	1	1	2
06:00-06:59	1	5	2	2	3	7	4	24	06:00-06:59	0	0	0	2	1	0	0	3
07:00-07:59	1	10	5	6	5	3	1	31	07:00-07:59	0	0	0	0	0	0	1	1
08:00-08:59	3	6	7	7	10	7	4	44	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	8	8	9	10	7	4	6	52	09:00-09:59	1	0	0	0	0	1	1	3
10:00-10:59	9	3	4	5	5	7	2	35	10:00-10:59	0	0	0	1	1	0	0	2
11:00-11:59	7	6	8	9	7	8	6	51	11:00-11:59	0	0	0	2	0	1	1	4
12:00-12:59	9	3	6	9	7	8	13	55	12:00-12:59	0	1	0	0	0	0	0	1
13:00-13:59	10	5	5	14	7	3	5	49	13:00-13:59	1	2	0	0	0	1	0	4
14:00-14:59	13	6	7	12	12	12	12	74	14:00-14:59	1	0	0	0	0	0	1	2
15:00-15:59	6	11	5	9	6	14	10	61	15:00-15:59	0	0	0	0	0	1	2	3
16:00-16:59	9	9	10	7	14	6	8	63	16:00-16:59	0	0	0	1	1	1	0	3
17:00-17:59	8	12	13	14	12	12	11	82	17:00-17:59	3	2	2	1	0	0	1	9
18:00-18:59	9	10	11	8	9	6	13	66	18:00-18:59	0	0	1	0	0	0	2	3
19:00-19:59	7	8	9	5	8	12	8	57	19:00-19:59	0	0	2	2	0	1	1	6
20:00-20:59	10	5	1	8	7	19	8	58	20:00-20:59	0	0	0	1	2	0	0	3
21:00-21:59	12	11	9	9	7	7	11	66	21:00-21:59	2	0	1	0	1	0	2	6
22:00-22:59	6	6	10	5	6	6	10	49	22:00-22:59	1	0	0	0	0	0	1	2
23:00-23:59	5	5	3	9	6	7	12	47	23:00-23:59	1	0	1	1	0	3	0	6
Total	172	151	149	168	162	179	183	1,164	Total	12	7	8	12	8	11	15	73

DIVISION AVENUE STATION

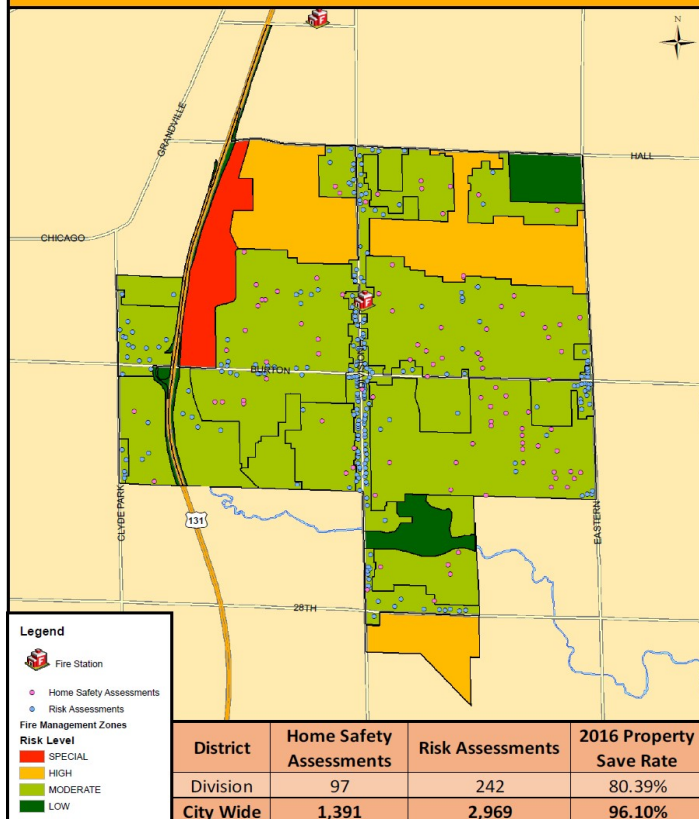
4 Minute Travel Compliance



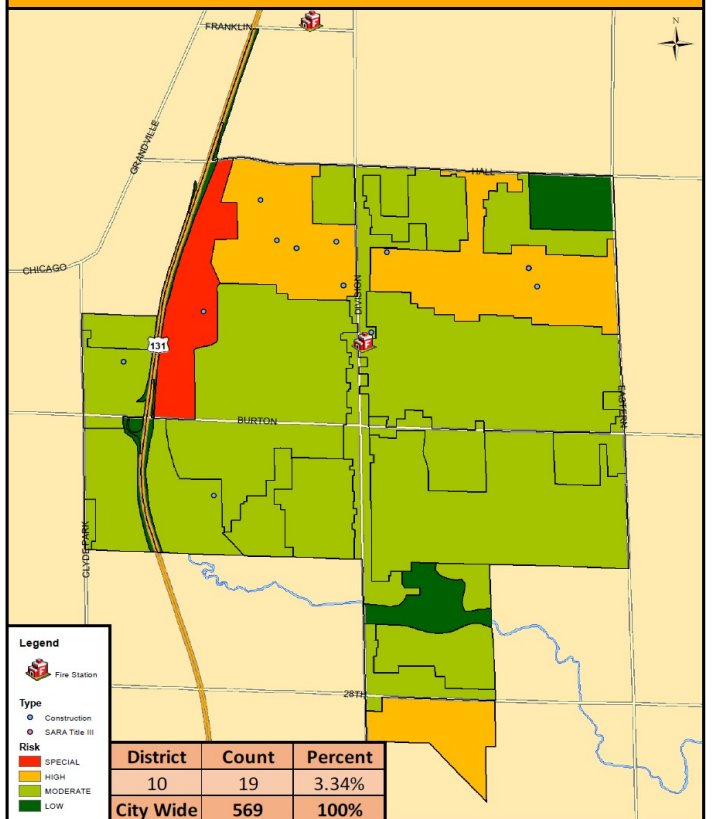
Effective Response Force Compliance



Community Risk Reduction Evaluation

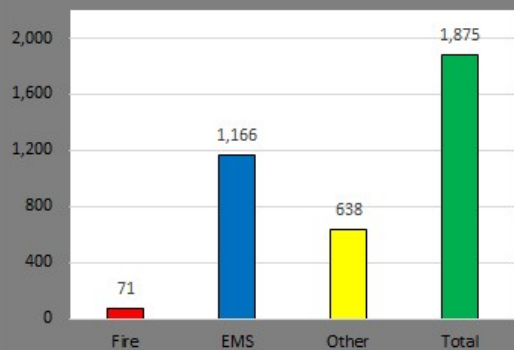


Commercial Development

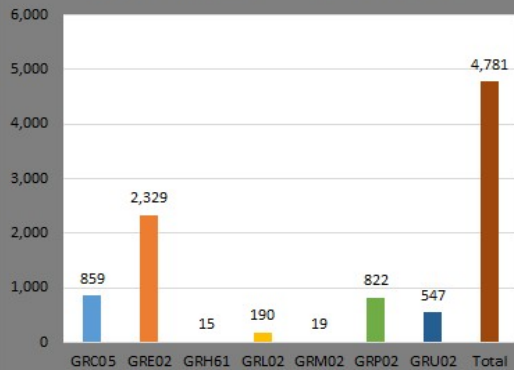


FRANKLIN STREET STATION

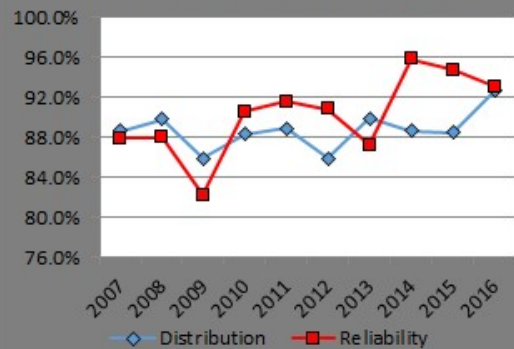
2016 Incidents in District



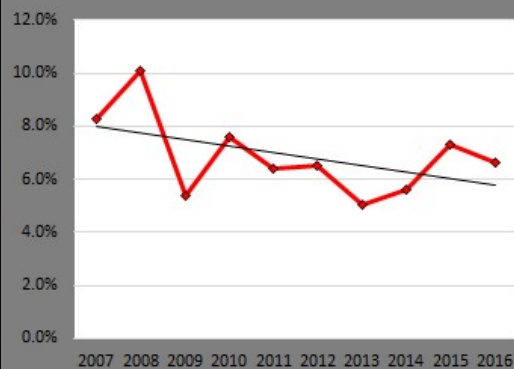
2016 Apparatus Responses



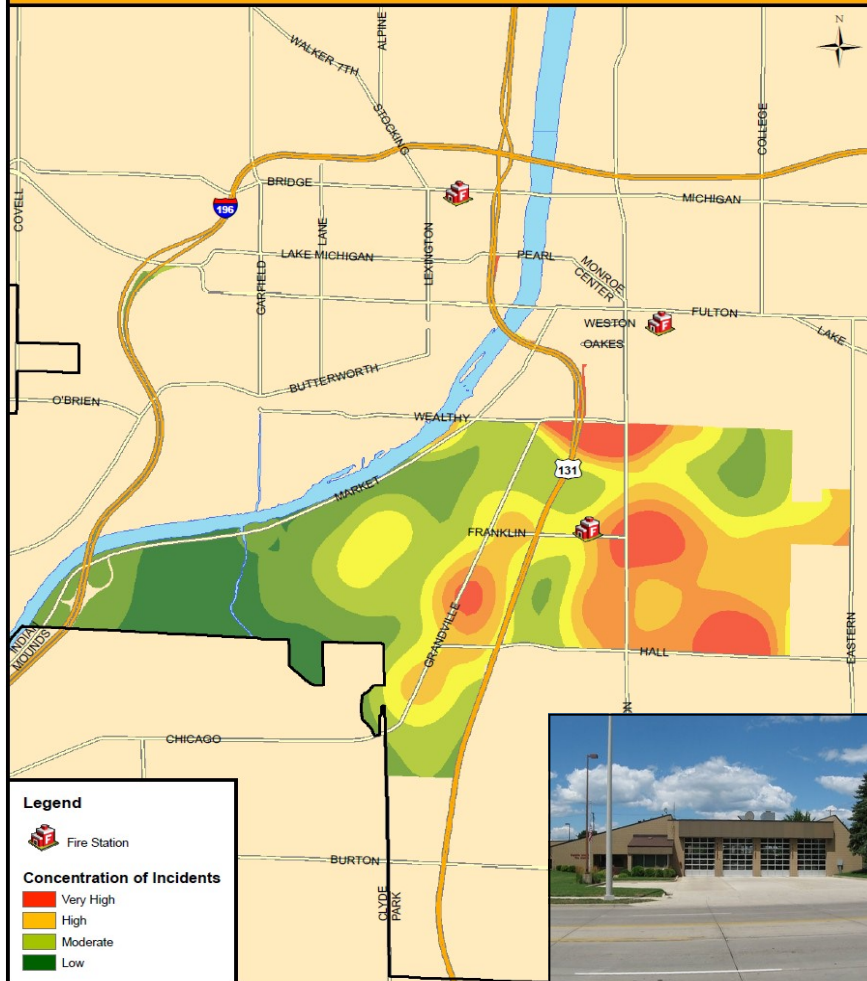
Distribution & Reliability Compliance



Simultaneous Calls



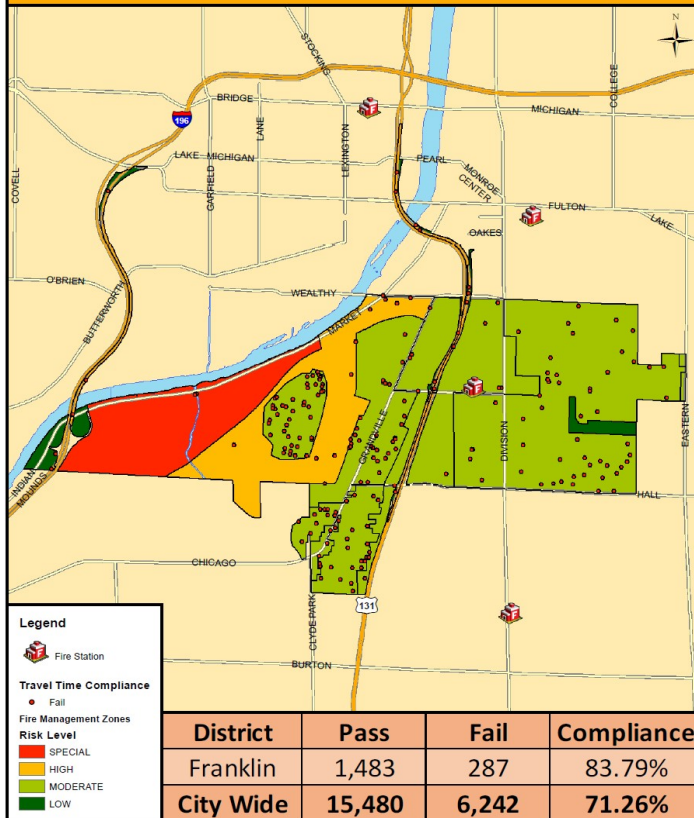
Hot Spot Map of 2016 Incidents



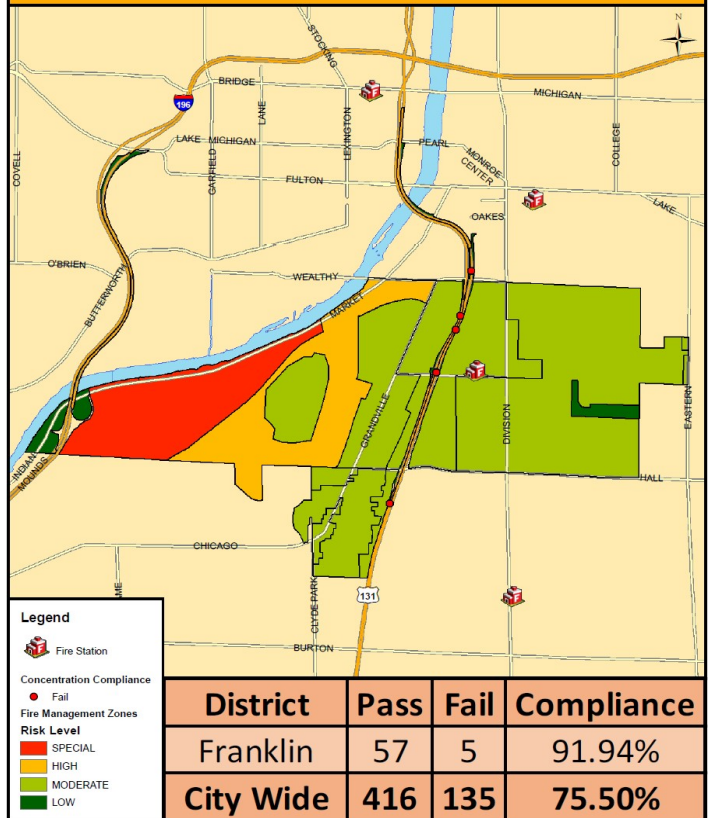
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	5	5	3	3	4	3	9	32	00:00-00:59	0	2	1	0	1	0	0	4
01:00-01:59	8	8	2	5	3	1	6	33	01:00-01:59	0	0	0	0	0	1	1	2
02:00-02:59	7	5	6	5	3	4	8	38	02:00-02:59	0	0	1	0	1	0	1	3
03:00-03:59	8	1	2	8	2	4	3	28	03:00-03:59	0	1	0	0	0	1	1	3
04:00-04:59	8	5	0	4	6	0	4	27	04:00-04:59	0	0	1	0	0	1	0	2
05:00-05:59	1	7	7	3	5	3	0	26	05:00-05:59	0	0	1	0	0	0	0	1
06:00-06:59	3	1	4	3	2	7	5	25	06:00-06:59	0	1	0	0	0	0	1	2
07:00-07:59	3	9	4	8	12	2	7	45	07:00-07:59	0	0	0	1	0	0	0	1
08:00-08:59	3	4	11	6	5	7	5	41	08:00-08:59	0	0	0	1	0	0	0	1
09:00-09:59	6	4	9	7	5	9	4	44	09:00-09:59	1	0	0	0	0	0	0	1
10:00-10:59	6	7	2	14	7	9	8	53	10:00-10:59	0	0	0	1	1	0	0	2
11:00-11:59	13	8	4	10	10	9	7	61	11:00-11:59	0	1	0	0	0	0	1	2
12:00-12:59	15	6	16	13	8	8	14	80	12:00-12:59	0	1	0	0	1	0	0	2
13:00-13:59	8	11	6	8	13	11	10	67	13:00-13:59	1	0	0	0	0	0	0	1
14:00-14:59	5	5	11	13	7	7	9	57	14:00-14:59	0	0	2	1	1	0	0	4
15:00-15:59	9	7	10	6	6	12	6	56	15:00-15:59	0	0	0	1	0	0	2	3
16:00-16:59	10	14	12	12	7	6	8	69	16:00-16:59	0	1	0	2	0	0	2	5
17:00-17:59	5	10	6	10	3	12	7	53	17:00-17:59	1	0	2	1	1	0	0	5
18:00-18:59	9	6	10	6	9	9	9	58	18:00-18:59	1	0	1	2	1	1	0	6
19:00-19:59	12	9	8	7	8	8	12	64	19:00-19:59	1	1	1	1	0	1	0	5
20:00-20:59	6	13	12	6	3	7	11	58	20:00-20:59	1	0	1	1	0	0	1	4
21:00-21:59	7	10	9	7	9	5	10	57	21:00-21:59	0	0	1	1	1	1	1	5
22:00-22:59	5	10	3	7	7	6	6	44	22:00-22:59	0	2	0	0	0	1	1	4
23:00-23:59	11	5	9	5	7	5	8	50	23:00-23:59	0	1	1	0	1	0	0	3
Total	173	170	166	176	151	154	176	1,166	Total	6	11	13	13	9	7	12	71

FRANKLIN STREET STATION

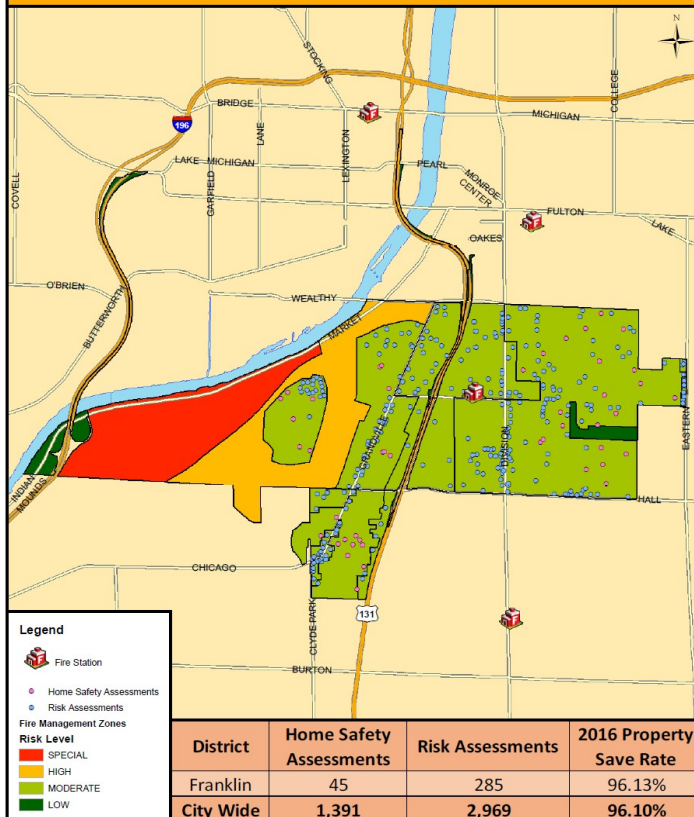
4 Minute Travel Compliance



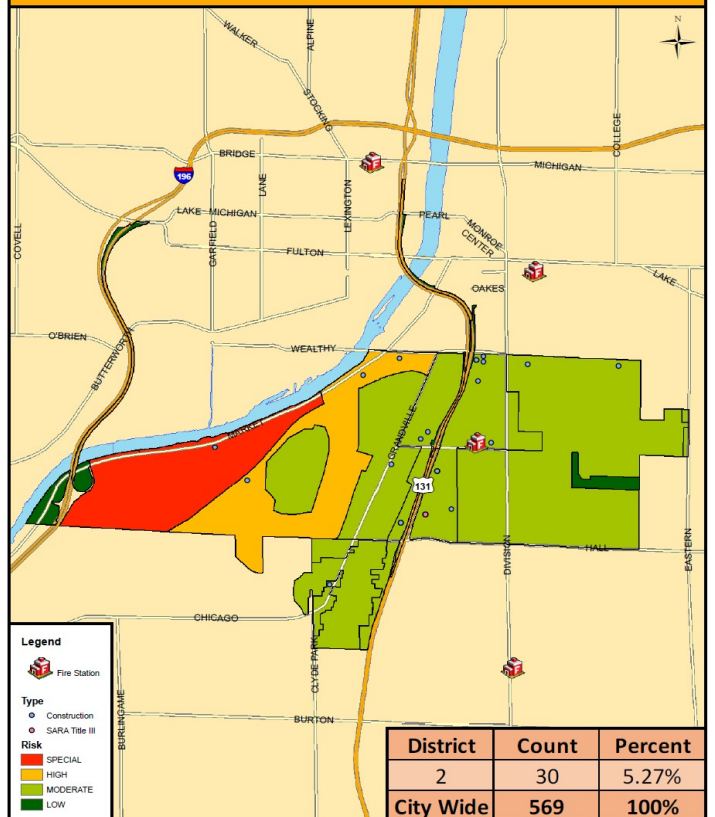
Effective Response Force Compliance



Community Risk Reduction Evaluation

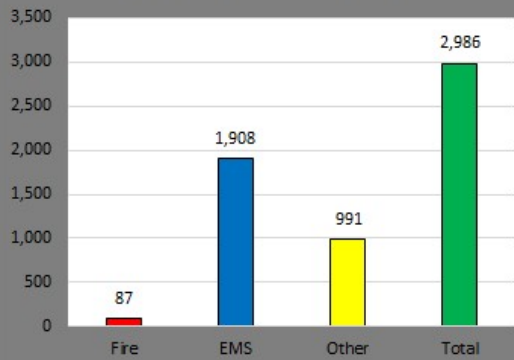


Commercial Development

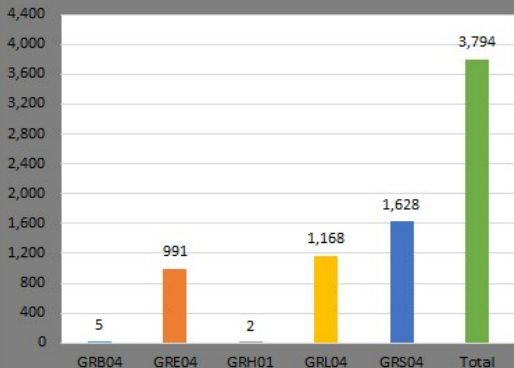


KALAMAZOO AVENUE STATION

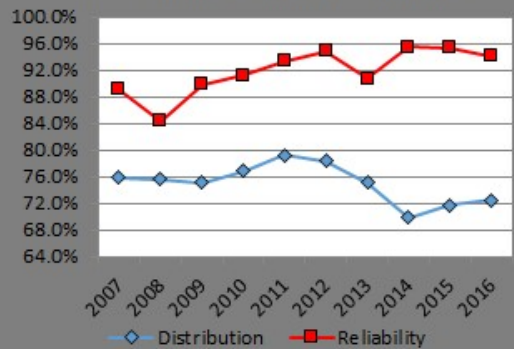
2016 Incidents in District



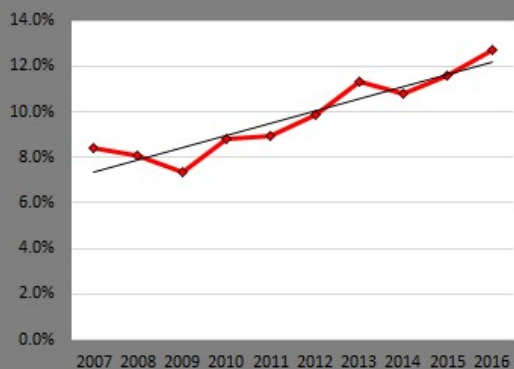
2016 Apparatus Responses



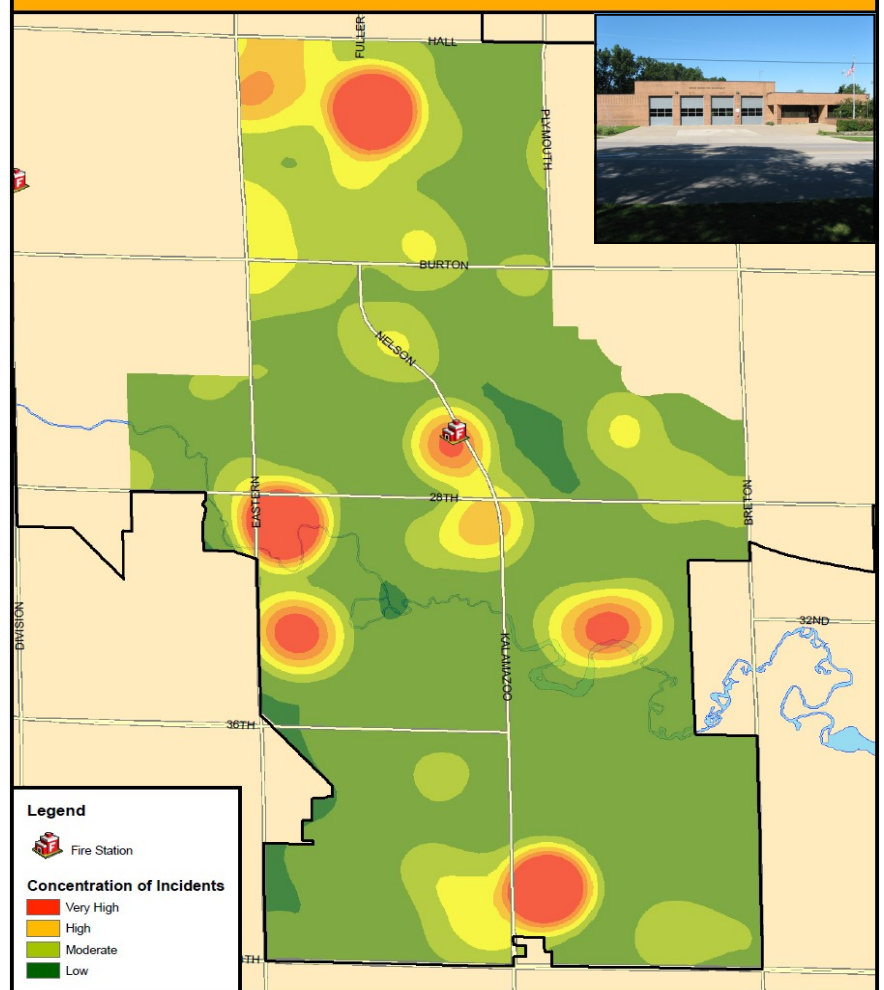
Distribution & Reliability Compliance



Simultaneous Calls



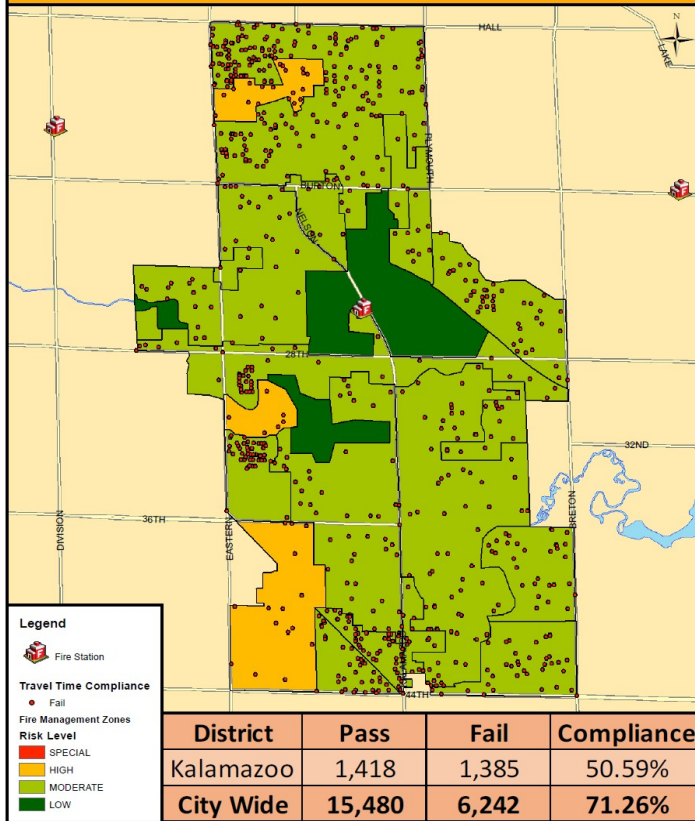
Hot Spot Map of 2016 Incidents



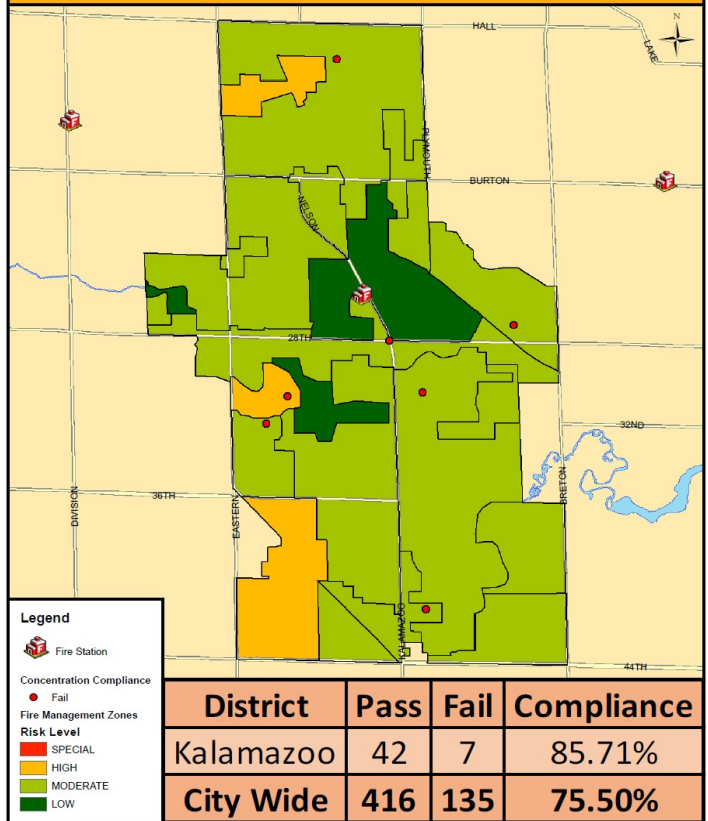
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	11	11	9	3	8	12	11	65	00:00-00:59	1	0	0	1	0	1	0	3
01:00-01:59	4	9	4	6	7	4	11	45	01:00-01:59	0	0	0	2	0	1	0	3
02:00-02:59	6	3	10	9	8	4	8	48	02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	9	12	3	7	11	6	5	53	03:00-03:59	0	0	0	2	0	0	0	2
04:00-04:59	1	7	10	3	5	7	5	38	04:00-04:59	1	0	0	0	0	2	0	3
05:00-05:59	4	2	3	6	4	5	5	29	05:00-05:59	1	0	0	0	0	1	0	2
06:00-06:59	3	13	10	5	6	8	8	53	06:00-06:59	0	0	1	0	0	0	0	1
07:00-07:59	8	10	9	7	4	13	7	58	07:00-07:59	0	0	0	0	0	1	0	1
08:00-08:59	8	16	14	12	7	11	15	83	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	16	18	13	17	5	12	11	92	09:00-09:59	0	0	0	0	1	1	0	2
10:00-10:59	14	16	22	19	16	16	17	120	10:00-10:59	1	1	0	1	0	0	0	3
11:00-11:59	16	21	14	16	16	15	12	110	11:00-11:59	1	1	0	1	0	0	1	4
12:00-12:59	14	16	15	14	15	14	13	101	12:00-12:59	1	0	0	0	0	0	0	1
13:00-13:59	6	19	12	18	14	10	17	96	13:00-13:59	2	1	1	2	0	1	0	7
14:00-14:59	14	15	10	16	12	21	16	104	14:00-14:59	1	0	1	3	1	0	0	6
15:00-15:59	9	13	13	11	13	16	12	87	15:00-15:59	0	0	0	1	1	2	1	5
16:00-16:59	13	16	14	16	19	22	18	118	16:00-16:59	1	0	1	0	1	0	0	3
17:00-17:59	8	13	18	14	13	15	15	96	17:00-17:59	0	3	2	1	0	1	0	7
18:00-18:59	12	12	8	19	16	16	13	96	18:00-18:59	0	2	1	2	2	1	1	9
19:00-19:59	15	6	13	13	11	19	11	88	19:00-19:59	2	1	0	3	0	2	3	11
20:00-20:59	13	14	12	18	17	18	19	111	20:00-20:59	1	0	0	1	0	1	0	3
21:00-21:59	6	4	14	10	11	14	19	78	21:00-21:59	0	1	1	1	0	1	2	6
22:00-22:59	11	11	9	13	11	9	9	73	22:00-22:59	1	0	2	0	0	0	1	4
23:00-23:59	8	7	11	11	9	9	11	66	23:00-23:59	0	0	0	1	0	0	0	1
Total	229	284	270	283	258	296	288	1,908	Total	14	10	10	22	6	16	9	87

KALAMAZOO AVENUE STATION

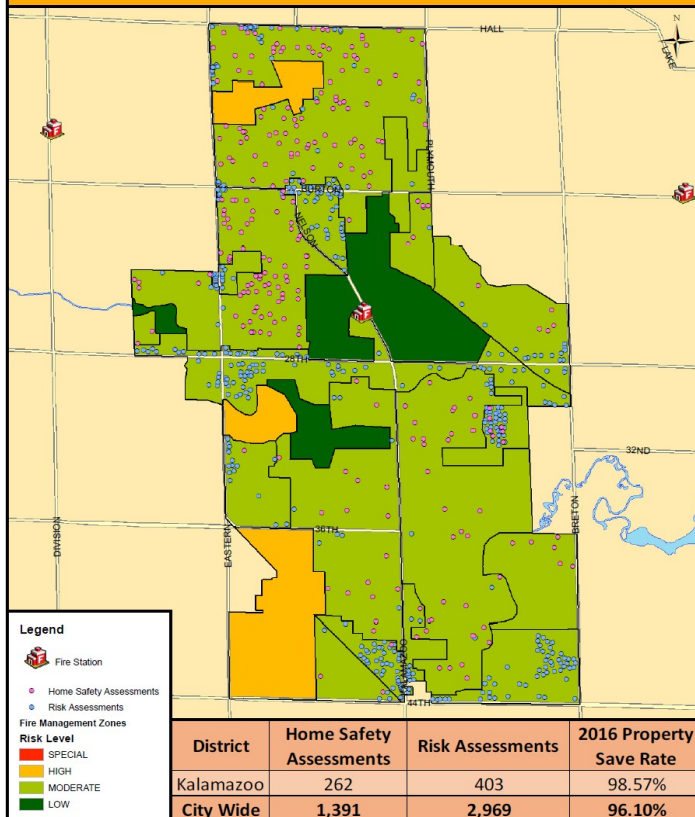
4 Minute Travel Compliance



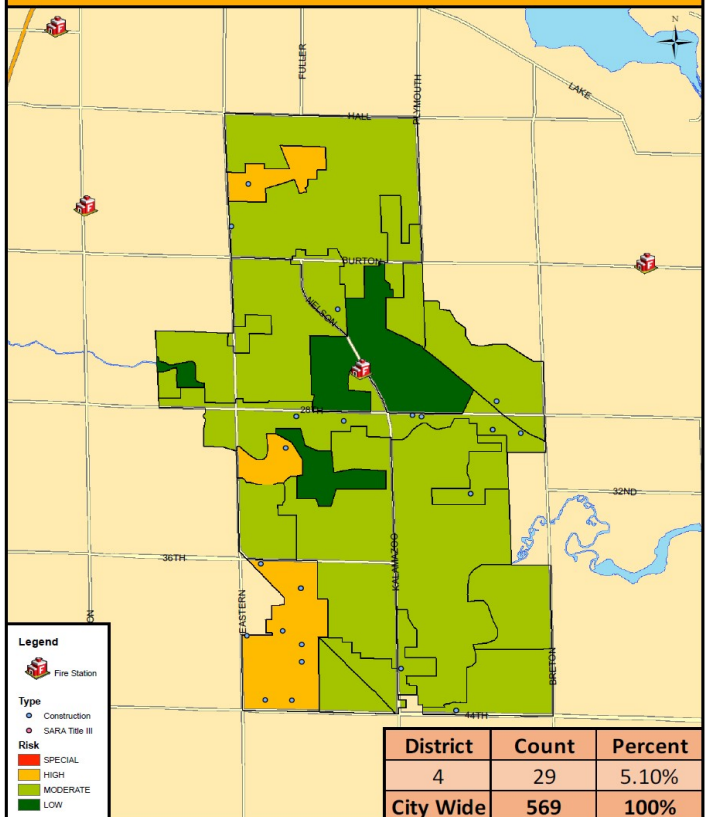
Effective Response Force Compliance



Community Risk Reduction Evaluation

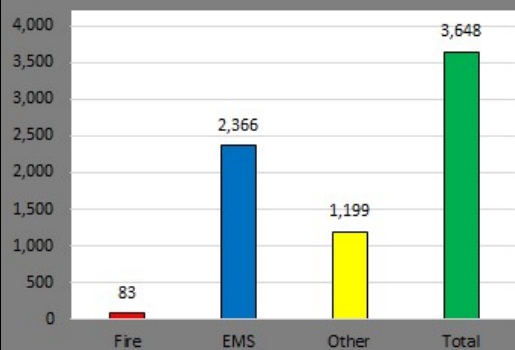


Commercial Development

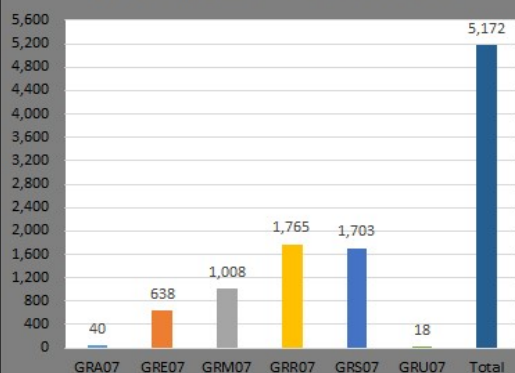


LAGRAVE AVENUE STATION

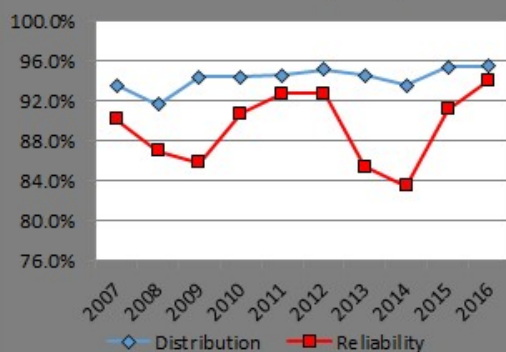
2016 Incidents in District



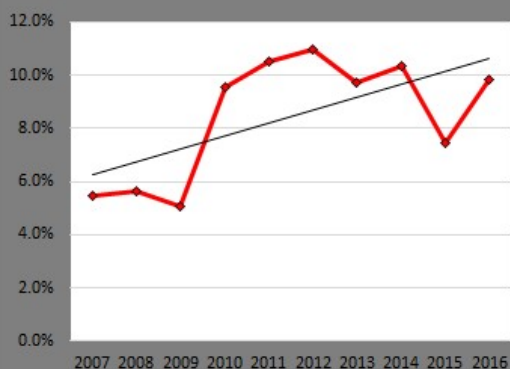
2016 Apparatus Responses



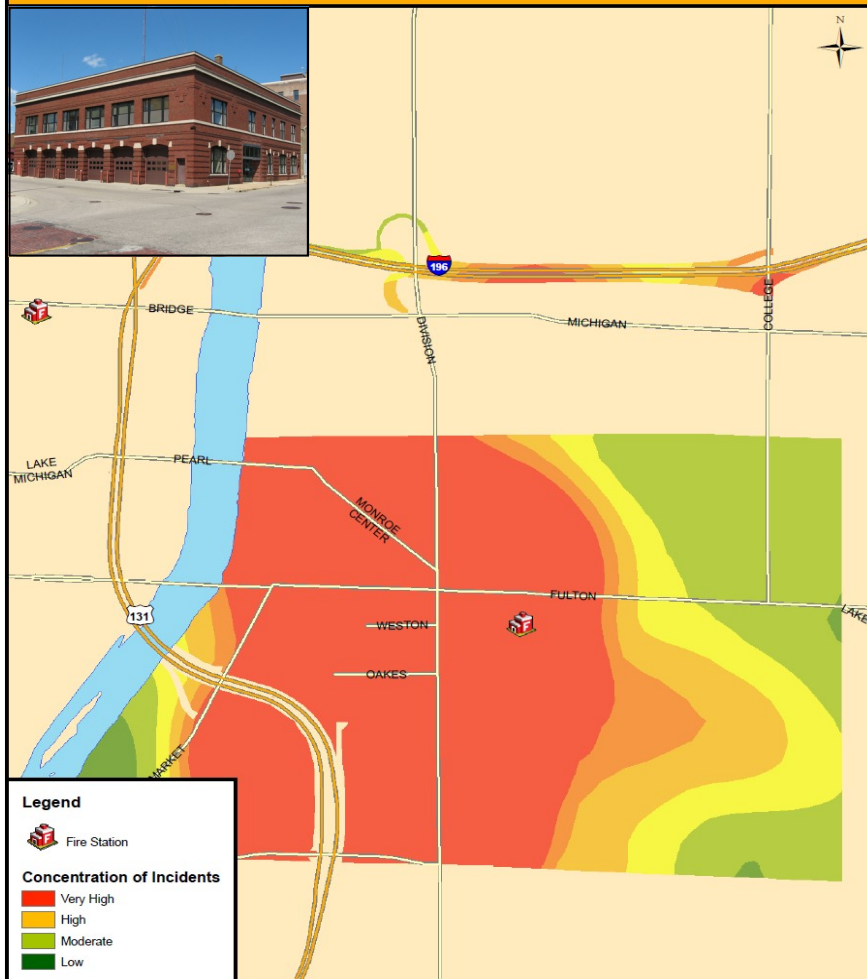
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2016 Incidents



Temporal Analysis - 2016 EMS

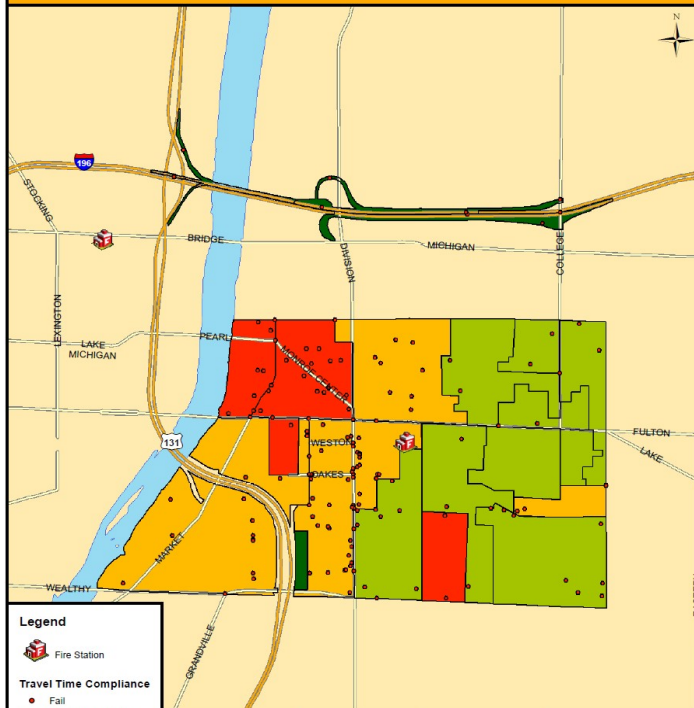
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	12	4	6	8	6	17	14	67
01:00-01:59	19	4	8	9	14	7	8	69
02:00-02:59	10	8	7	7	9	11	12	64
03:00-03:59	5	3	4	4	6	6	5	33
04:00-04:59	5	5	10	3	1	3	1	28
05:00-05:59	7	7	13	6	4	2	7	46
06:00-06:59	5	3	5	9	6	9	5	42
07:00-07:59	5	7	7	15	6	8	6	54
08:00-08:59	11	11	10	7	4	9	11	63
09:00-09:59	6	19	12	16	6	17	10	86
10:00-10:59	9	12	20	23	13	17	4	98
11:00-11:59	17	19	17	14	24	23	12	126
12:00-12:59	11	19	21	19	13	17	13	113
13:00-13:59	15	16	24	24	15	22	24	140
14:00-14:59	17	21	28	19	25	20	21	151
15:00-15:59	17	16	25	23	19	30	18	148
16:00-16:59	13	17	19	22	26	22	27	146
17:00-17:59	17	20	19	17	14	22	18	127
18:00-18:59	19	22	16	20	20	14	18	129
19:00-19:59	25	30	25	16	29	25	21	171
20:00-20:59	22	24	17	12	15	21	23	134
21:00-21:59	16	19	27	14	22	19	20	137
22:00-22:59	14	11	15	15	14	16	20	105
23:00-23:59	13	9	10	13	11	17	16	89
Total	310	326	365	335	322	374	334	2,366

Temporal Analysis - 2016 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	1	0	1	0	0	3
01:00-01:59	0	0	0	0	0	0	1	1
02:00-02:59	0	0	0	0	1	3	1	5
03:00-03:59	0	0	1	1	0	1	1	4
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	1	0	0	0	0	0	1	2
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	1	0	1	0	2	0	0	4
09:00-09:59	1	0	0	1	0	0	0	2
10:00-10:59	1	0	0	1	0	1	0	3
11:00-11:59	0	1	0	0	0	1	1	3
12:00-12:59	1	2	0	1	0	1	1	6
13:00-13:59	2	0	2	0	0	1	1	6
14:00-14:59	1	0	0	1	0	2	0	4
15:00-15:59	1	1	2	2	0	0	1	7
16:00-16:59	0	1	0	0	1	3	1	6
17:00-17:59	1	0	2	0	1	2	1	7
18:00-18:59	0	0	0	0	2	1	0	3
19:00-19:59	1	0	0	1	0	0	0	2
20:00-20:59	0	2	1	0	1	0	0	4
21:00-21:59	0	2	1	1	0	1	1	6
22:00-22:59	1	2	0	1	0	0	0	4
23:00-23:59	0	0	0	0	0	0	1	1
Total	13	11	11	10	9	17	12	83

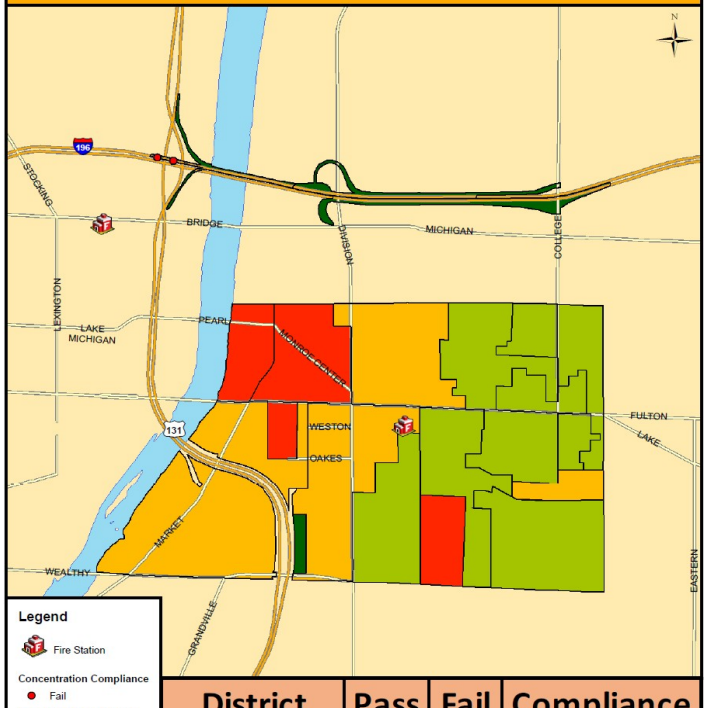
LAGRAVE AVENUE STATION

4 Minute Travel Compliance



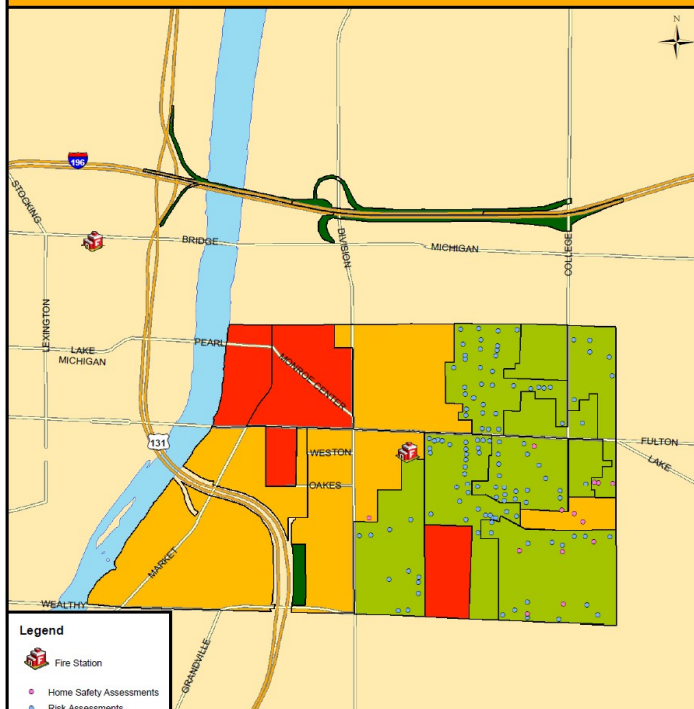
District	Pass	Fail	Compliance
LaGrave	3,190	220	93.55%
City Wide	15,480	6,242	71.26%

Effective Response Force Compliance



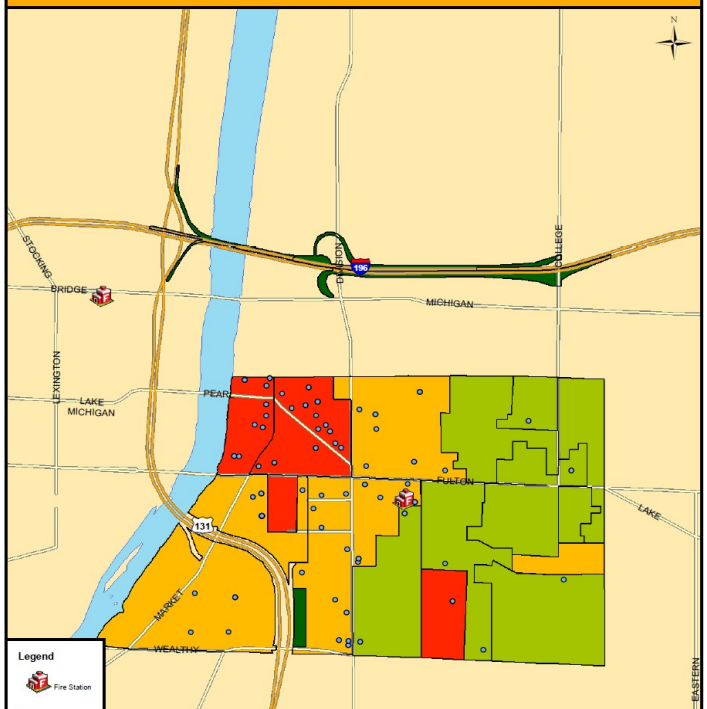
District	Pass	Fail	Compliance
LaGrave	34	2	94.44%
City Wide	416	135	75.50%

Community Risk Reduction Evaluation



District	Home Safety Assessments	Risk Assessments	2016 Property Save Rate
LaGrave	13	120	99.07%
City Wide	1,391	2,969	96.10%

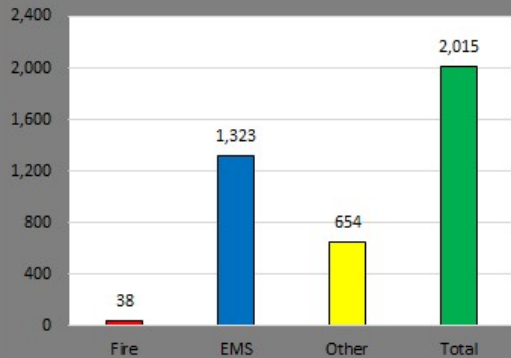
Commercial Development



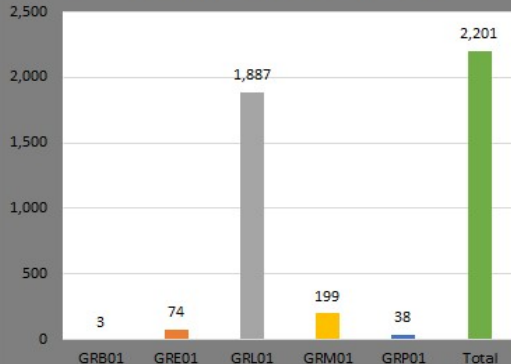
District	Count	Percent
7	142	24.96%
City Wide	569	100%

LEONARD STREET STATION

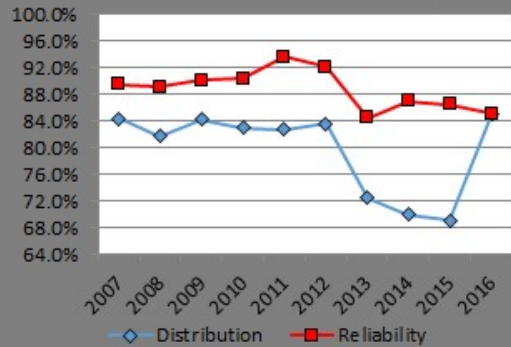
2016 Incidents in District



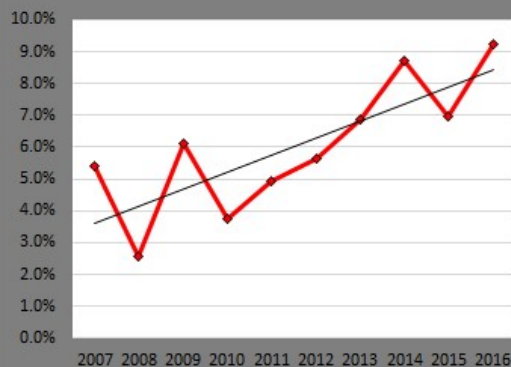
2016 Apparatus Responses



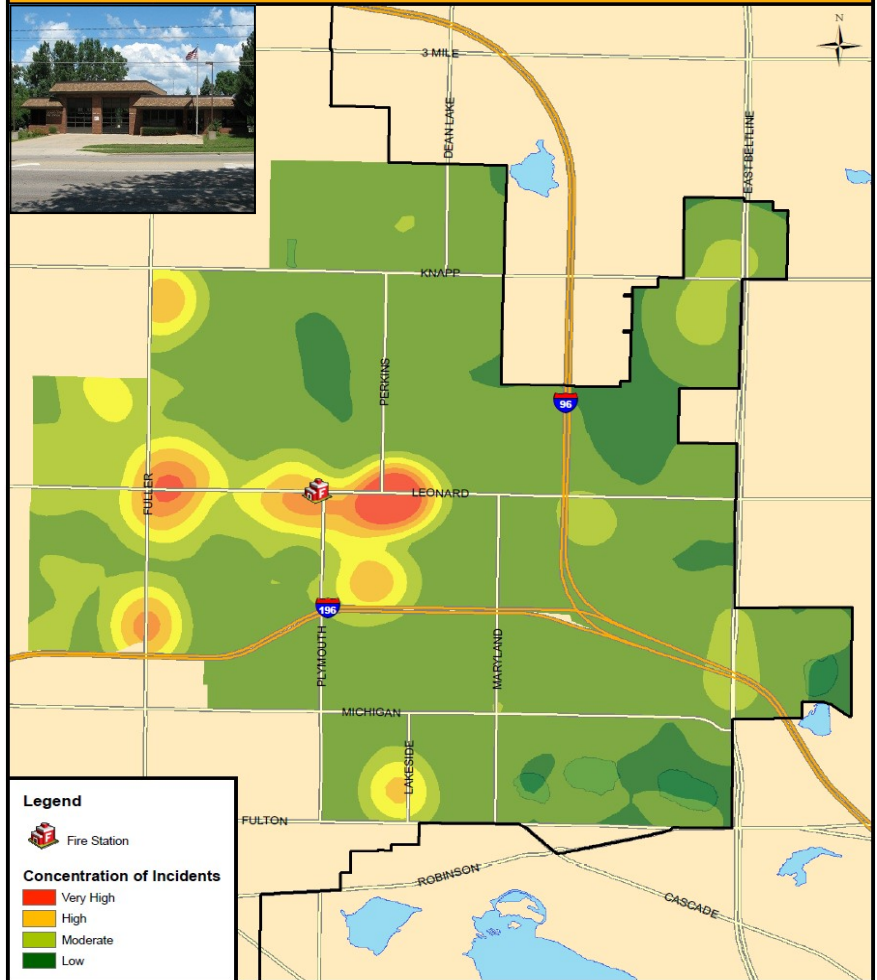
Distribution & Reliability Compliance



Simultaneous Calls



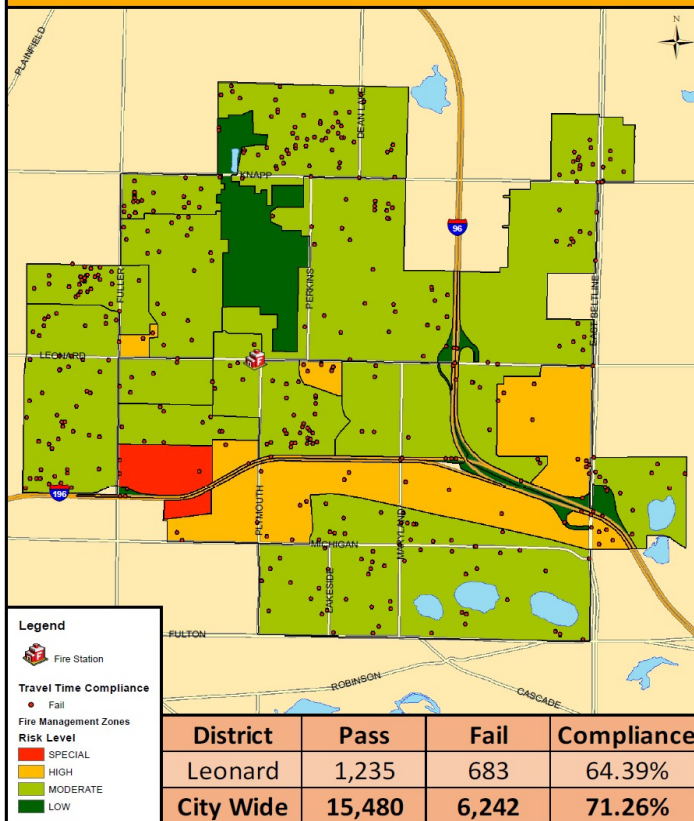
Hot Spot Map of 2016 Incidents



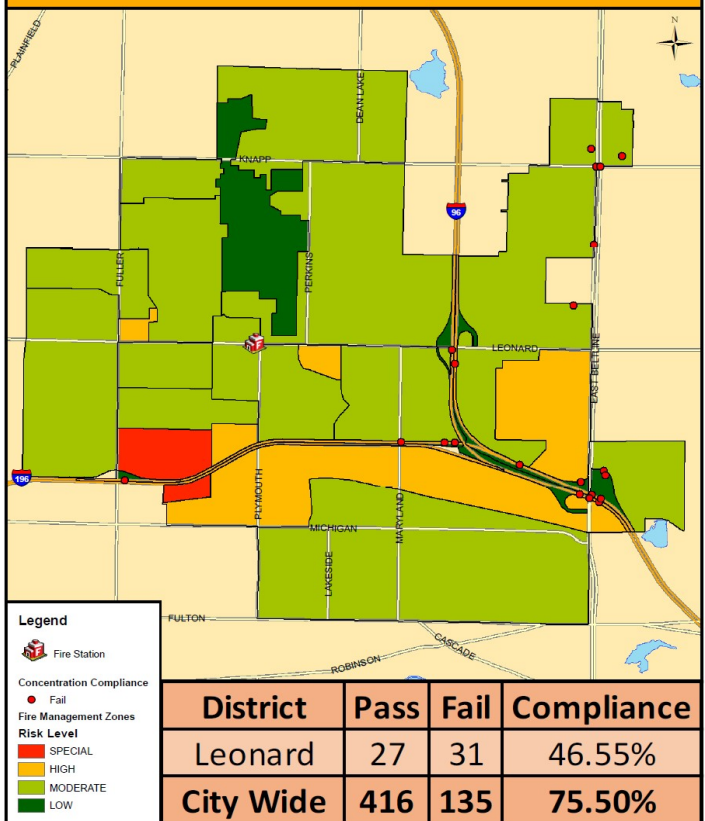
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	8	6	4	1	2	5	4	30	00:00-00:59	0	1	0	0	1	0	0	2
01:00-01:59	4	10	2	2	1	6	9	34	01:00-01:59	0	0	1	1	0	0	0	2
02:00-02:59	5	4	5	2	3	2	10	31	02:00-02:59	0	1	0	0	0	0	1	2
03:00-03:59	5	2	7	3	4	3	2	26	03:00-03:59	0	0	0	0	0	2	0	2
04:00-04:59	5	4	3	2	1	4	2	21	04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	5	2	2	2	7	2	1	21	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	7	7	5	4	7	5	5	40	06:00-06:59	0	0	1	0	0	0	1	2
07:00-07:59	3	9	7	3	9	10	7	48	07:00-07:59	0	0	1	0	0	1	0	2
08:00-08:59	2	9	11	15	10	10	10	67	08:00-08:59	0	0	0	0	0	1	0	1
09:00-09:59	7	14	16	11	13	12	7	80	09:00-09:59	0	0	0	1	0	1	0	2
10:00-10:59	12	10	19	9	13	9	12	84	10:00-10:59	0	1	0	0	0	0	0	1
11:00-11:59	7	17	11	13	7	12	6	73	11:00-11:59	1	0	1	0	1	0	0	3
12:00-12:59	9	8	11	7	16	10	12	73	12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	14	14	13	17	8	10	6	82	13:00-13:59	0	0	0	1	0	0	0	1
14:00-14:59	6	8	13	14	8	15	8	72	14:00-14:59	0	1	0	0	0	0	0	1
15:00-15:59	7	13	17	9	14	13	7	80	15:00-15:59	0	1	0	0	0	1	0	2
16:00-16:59	5	11	19	10	18	10	9	82	16:00-16:59	0	0	0	0	0	0	0	0
17:00-17:59	9	9	7	14	14	11	10	74	17:00-17:59	0	1	0	1	0	0	0	2
18:00-18:59	10	7	5	7	3	5	15	52	18:00-18:59	0	0	0	0	2	1	0	3
19:00-19:59	8	7	4	9	3	9	4	44	19:00-19:59	0	0	0	0	2	2	0	4
20:00-20:59	7	13	13	8	11	16	4	72	20:00-20:59	0	0	1	1	0	0	1	3
21:00-21:59	5	10	8	12	14	5	6	60	21:00-21:59	0	1	0	0	1	0	0	2
22:00-22:59	12	4	6	5	7	6	7	47	22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	5	3	6	3	5	4	4	30	23:00-23:59	0	0	0	0	1	0	0	1
Total	167	201	214	182	198	194	167	1,323	Total	1	7	5	5	8	9	3	38

LEONARD STREET STATION

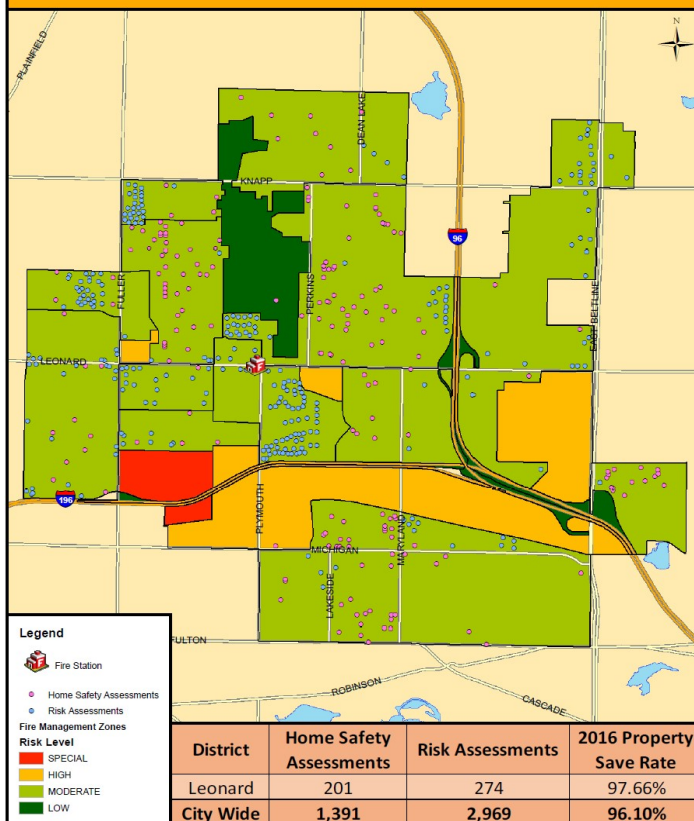
4 Minute Travel Compliance



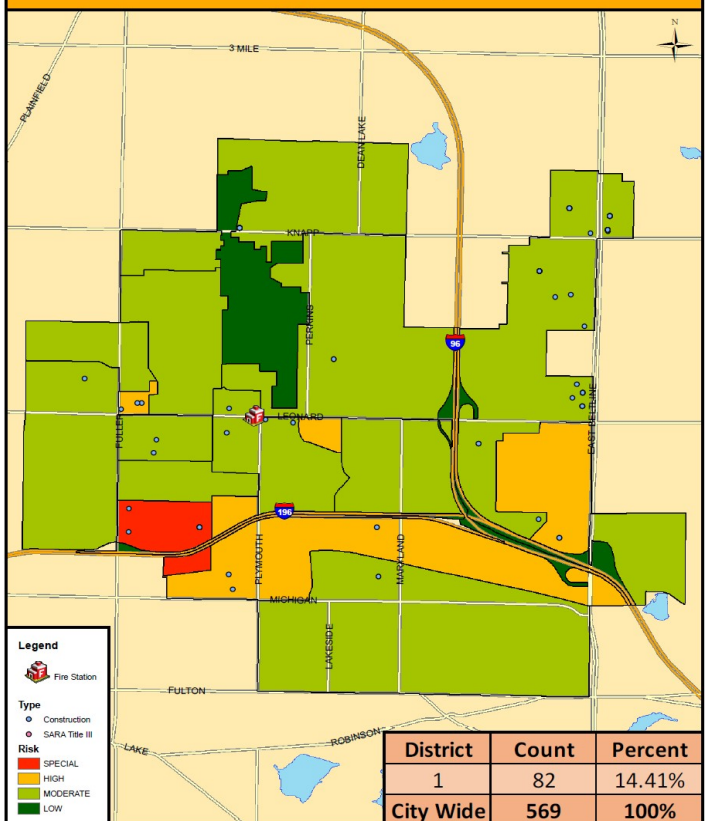
Effective Response Force Compliance



Community Risk Reduction Evaluation

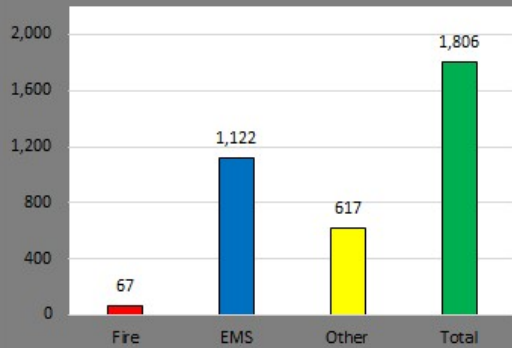


Commercial Development

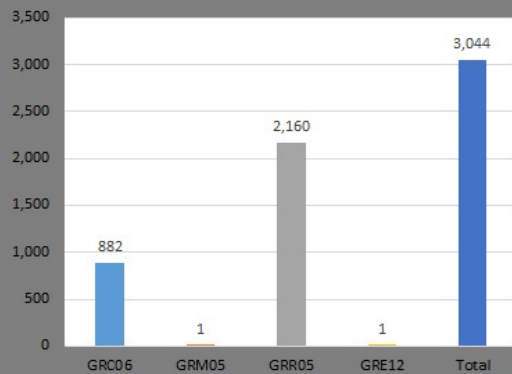


MONROE AVENUE STATION

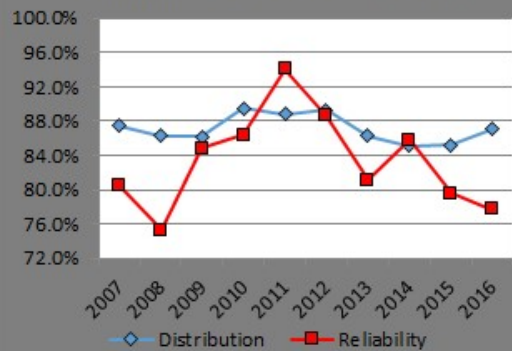
2016 Incidents in District



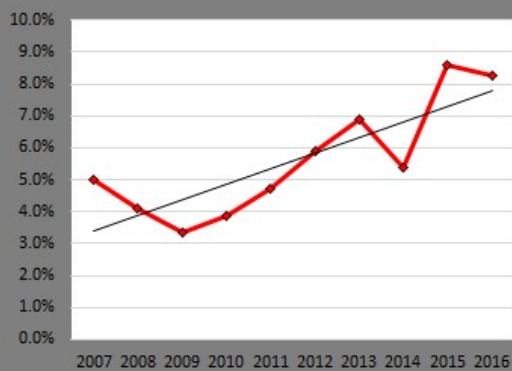
2016 Apparatus Responses



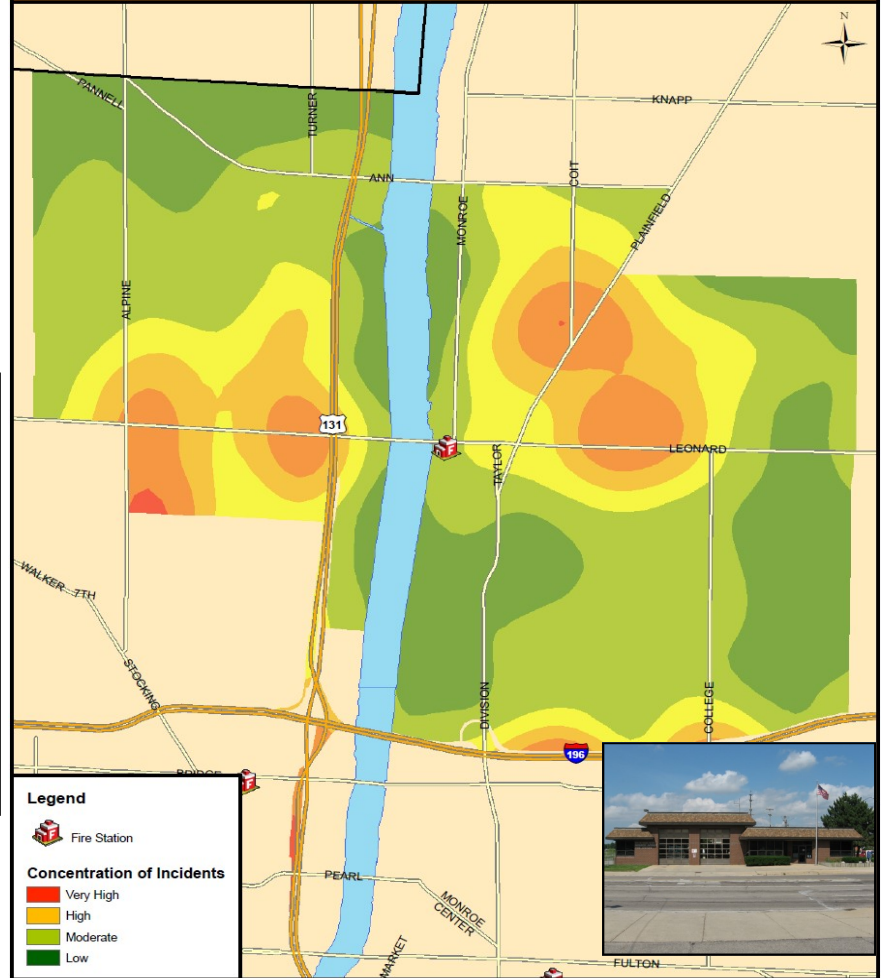
Distribution & Reliability Compliance



Simultaneous Calls



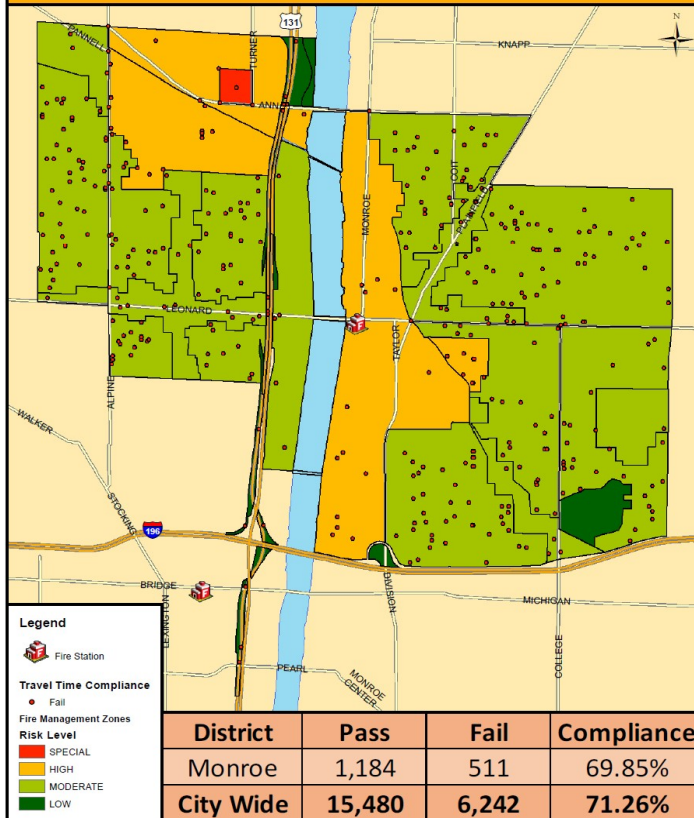
Hot Spot Map of 2016 Incidents



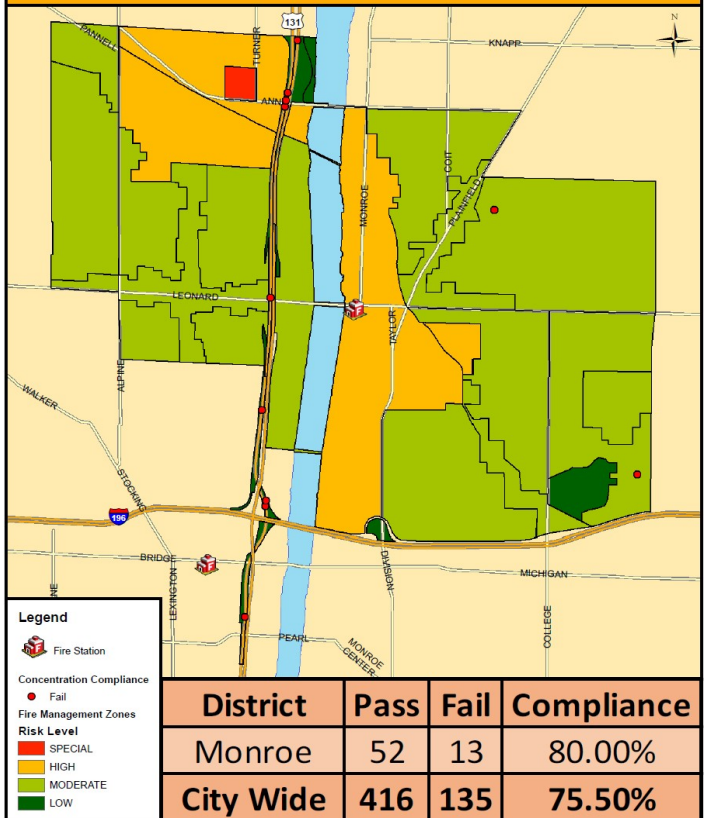
Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	4	4	7	1	6	7	10	39	00:00-00:59	0	1	1	0	0	0	0	2
01:00-01:59	8	2	6	8	5	3	4	36	01:00-01:59	0	1	0	0	0	0	0	1
02:00-02:59	7	2	4	3	4	4	7	31	02:00-02:59	0	0	0	0	0	0	1	1
03:00-03:59	4	1	5	0	2	1	5	18	03:00-03:59	0	1	0	0	0	0	1	2
04:00-04:59	5	3	3	2	3	4	6	26	04:00-04:59	0	0	0	1	0	0	0	1
05:00-05:59	4	5	3	2	3	4	6	27	05:00-05:59	2	0	0	1	0	0	0	3
06:00-06:59	5	3	4	3	3	5	7	30	06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	4	2	6	2	2	6	1	23	07:00-07:59	0	1	0	1	1	0	0	3
08:00-08:59	1	5	8	7	12	5	6	44	08:00-08:59	0	1	0	0	0	0	0	1
09:00-09:59	4	7	3	3	7	8	3	35	09:00-09:59	1	3	2	0	0	1	0	7
10:00-10:59	10	12	8	4	16	10	4	64	10:00-10:59	0	1	0	1	1	0	0	3
11:00-11:59	5	5	11	8	10	7	4	50	11:00-11:59	0	0	1	0	1	2	0	4
12:00-12:59	6	12	4	10	10	7	7	56	12:00-12:59	2	0	0	1	0	0	1	4
13:00-13:59	7	9	7	13	6	10	7	59	13:00-13:59	0	1	0	0	0	0	1	2
14:00-14:59	7	10	8	8	9	7	2	51	14:00-14:59	0	2	0	2	0	0	1	5
15:00-15:59	10	8	5	10	9	8	18	68	15:00-15:59	0	1	2	0	0	0	1	4
16:00-16:59	12	10	13	10	9	6	16	76	16:00-16:59	0	0	1	1	0	1	1	4
17:00-17:59	12	6	7	6	9	6	10	56	17:00-17:59	1	0	0	0	0	0	0	1
18:00-18:59	6	10	8	7	13	9	6	59	18:00-18:59	0	0	2	0	1	1	1	5
19:00-19:59	14	6	13	14	6	10	7	70	19:00-19:59	0	1	0	0	1	0	0	2
20:00-20:59	11	10	14	10	8	8	12	73	20:00-20:59	0	2	1	0	0	0	0	3
21:00-21:59	8	7	4	4	9	8	8	48	21:00-21:59	1	0	0	2	0	1	0	4
22:00-22:59	5	6	7	5	5	7	7	42	22:00-22:59	0	1	0	0	1	0	0	2
23:00-23:59	6	3	3	7	9	4	9	41	23:00-23:59	1	0	0	0	0	2	0	3
Total	165	148	161	147	175	154	172	1,122	Total	8	17	10	10	6	8	8	67

MONROE AVENUE STATION

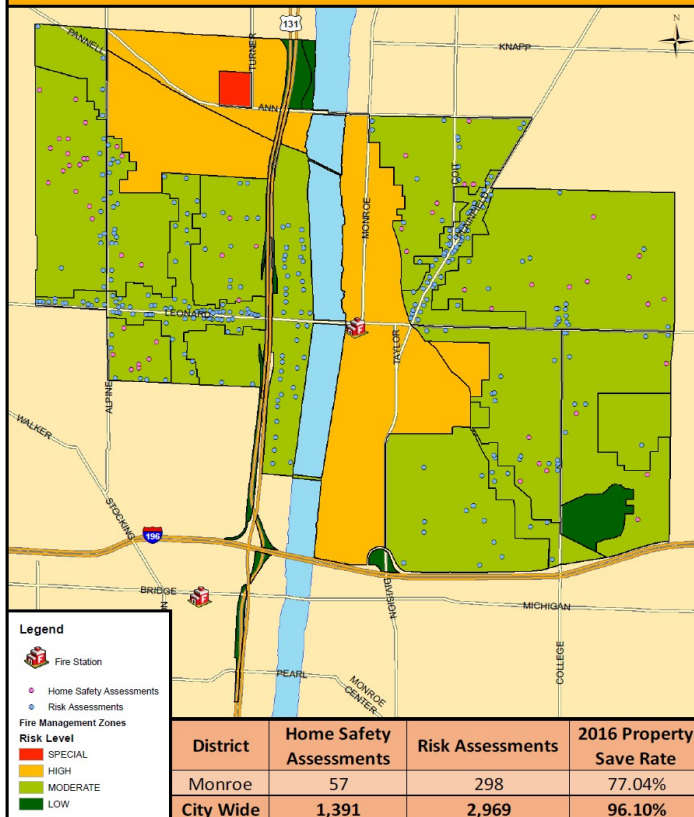
4 Minute Travel Compliance



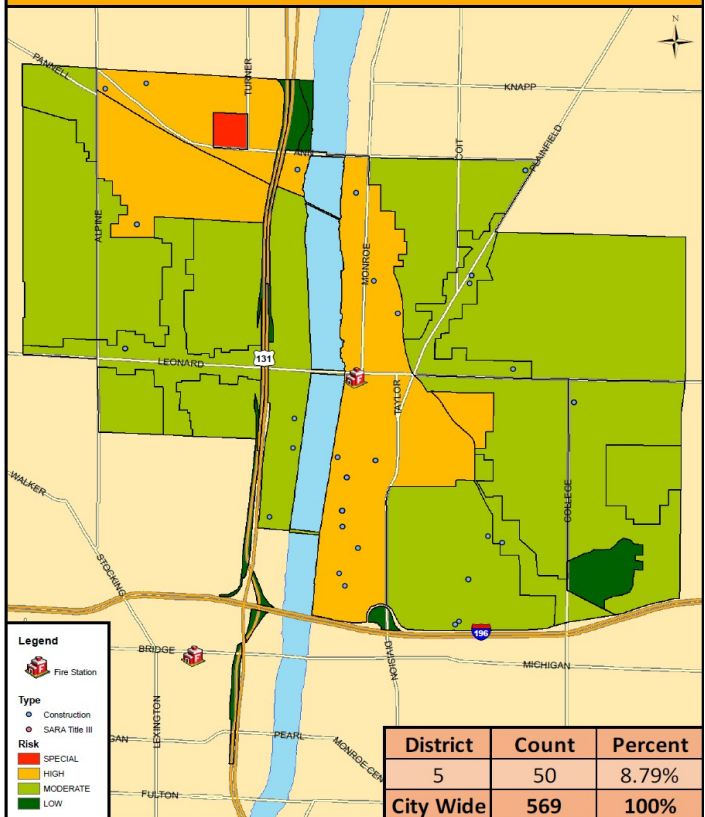
Effective Response Force Compliance



Community Risk Reduction Evaluation

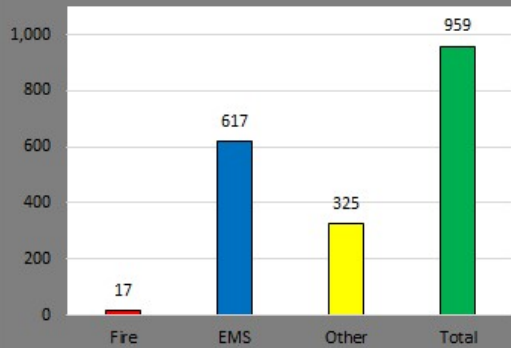


Commercial Development

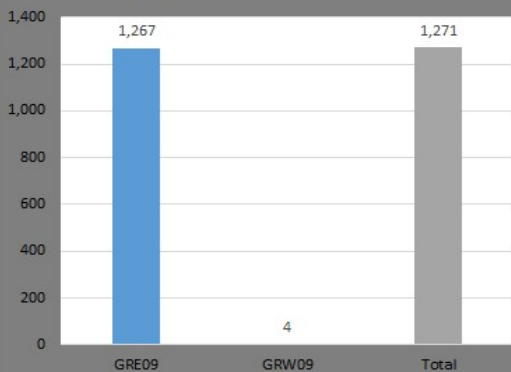


PLAINFIELD AVENUE STATION

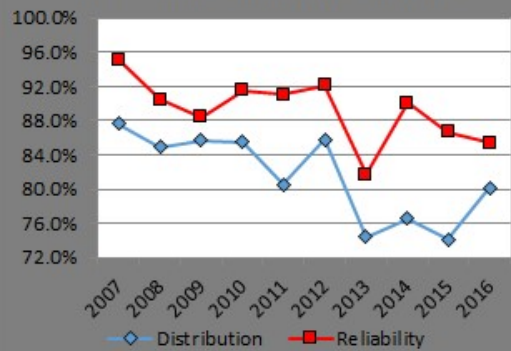
2016 Incidents in District



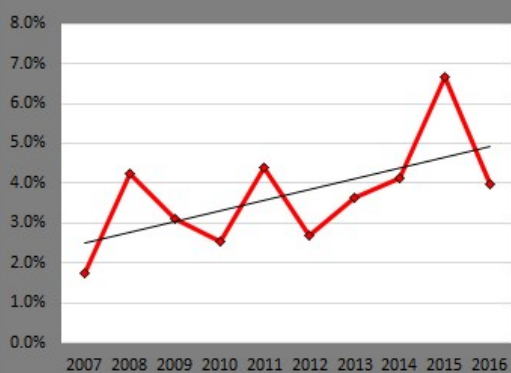
2016 Apparatus Responses



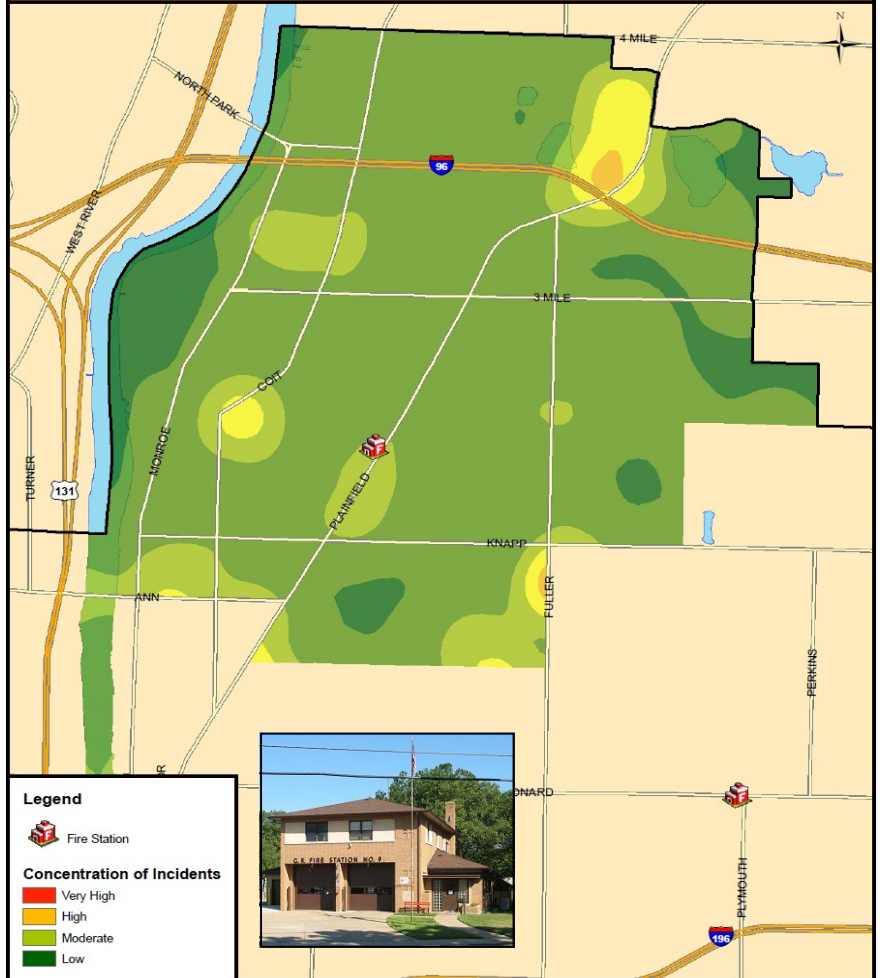
Distribution & Reliability Compliance



Simultaneous Calls



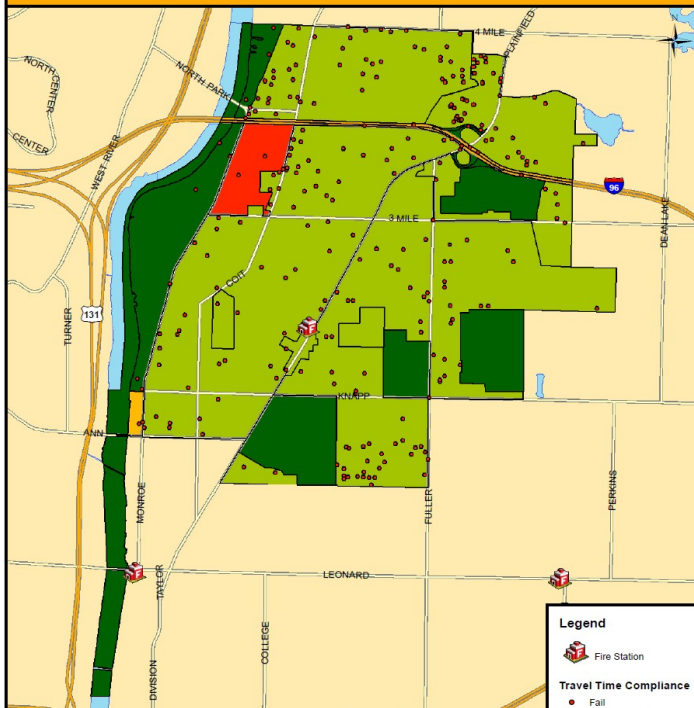
Hot Spot Map of 2016 Incidents



Temporal Analysis - 2016 EMS									Temporal Analysis - 2016 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	3	1	3	4	3	1	4	19	00:00-00:59	0	0	0	0	0	1	0	1
01:00-01:59	3	3	1	3	4	1	6	21	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	3	1	2	5	3	3	4	21	02:00-02:59	0	0	0	0	0	0	1	1
03:00-03:59	1	3	2	1	2	1	1	11	03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	4	2	4	3	2	2	3	20	04:00-04:59	0	0	0	0	0	0	1	1
05:00-05:59	2	3	1	0	1	1	0	8	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	1	2	1	4	0	5	3	16	06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	5	3	2	1	5	2	0	18	07:00-07:59	0	0	0	2	0	0	0	2
08:00-08:59	2	4	5	6	9	4	6	36	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	3	1	4	5	5	5	2	25	09:00-09:59	0	0	0	0	0	1	0	1
10:00-10:59	7	2	6	7	2	8	3	35	10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	2	4	4	2	5	3	5	25	11:00-11:59	0	0	0	0	0	0	0	0
12:00-12:59	4	1	8	7	5	11	5	41	12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	5	4	3	4	5	3	4	28	13:00-13:59	0	1	0	0	1	0	0	2
14:00-14:59	6	6	5	8	6	5	2	38	14:00-14:59	0	1	1	0	0	0	0	2
15:00-15:59	3	4	5	6	5	3	5	31	15:00-15:59	1	0	0	0	0	0	0	1
16:00-16:59	3	1	3	6	2	4	3	22	16:00-16:59	1	0	0	0	0	0	0	1
17:00-17:59	5	7	5	4	2	2	7	32	17:00-17:59	1	0	1	0	0	0	0	2
18:00-18:59	4	6	3	4	7	3	4	31	18:00-18:59	0	0	0	0	0	1	0	1
19:00-19:59	5	5	5	2	5	2	4	28	19:00-19:59	0	0	0	0	0	0	0	0
20:00-20:59	2	4	1	6	7	6	10	36	20:00-20:59	0	0	0	1	0	0	0	1
21:00-21:59	3	3	6	5	8	3	5	33	21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	2	2	4	4	3	5	5	25	22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	3	4	2	0	1	2	5	17	23:00-23:59	0	0	1	0	0	0	0	1
Total	81	76	85	97	97	85	96	617	Total	3	2	3	3	1	3	2	17

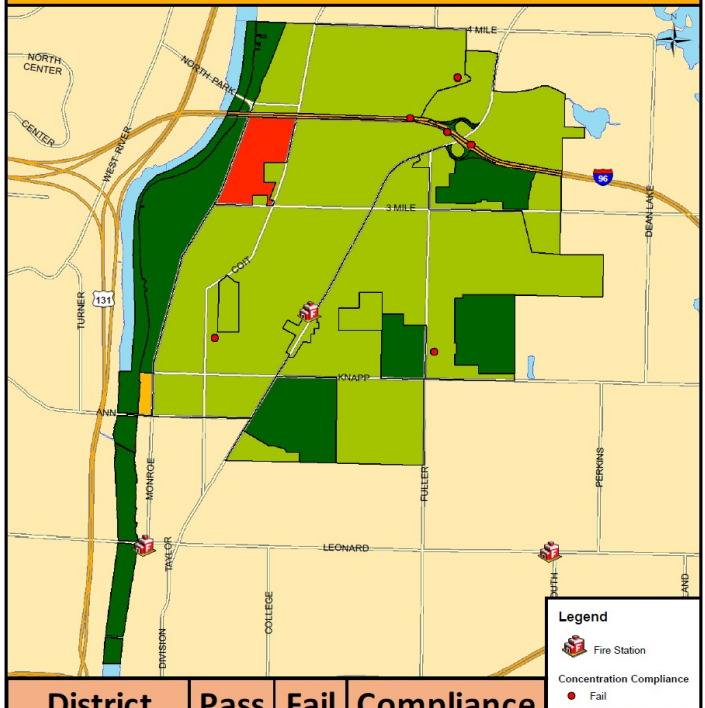
PLAINFIELD AVENUE STATION

4 Minute Travel Compliance



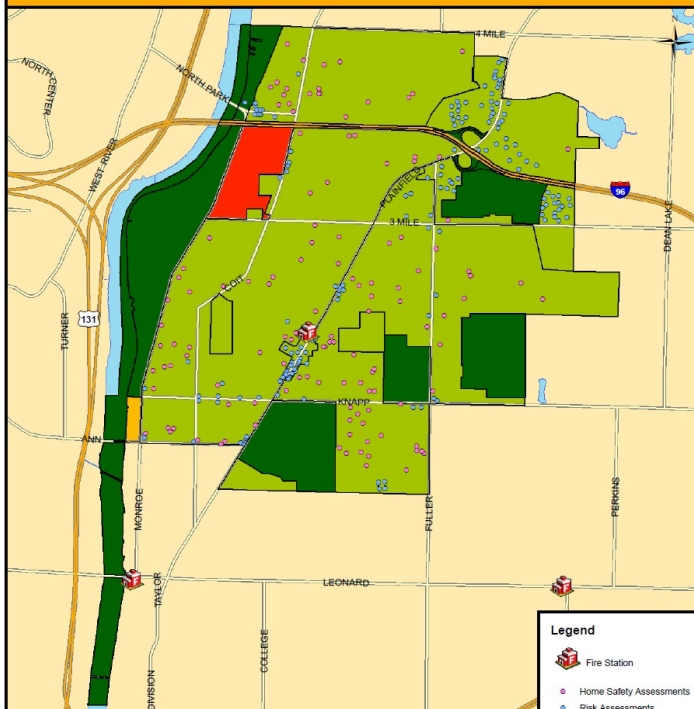
District	Pass	Fail	Compliance
Plainfield	523	394	57.03%
City Wide	15,480	6,242	71.26%

Effective Response Force Compliance



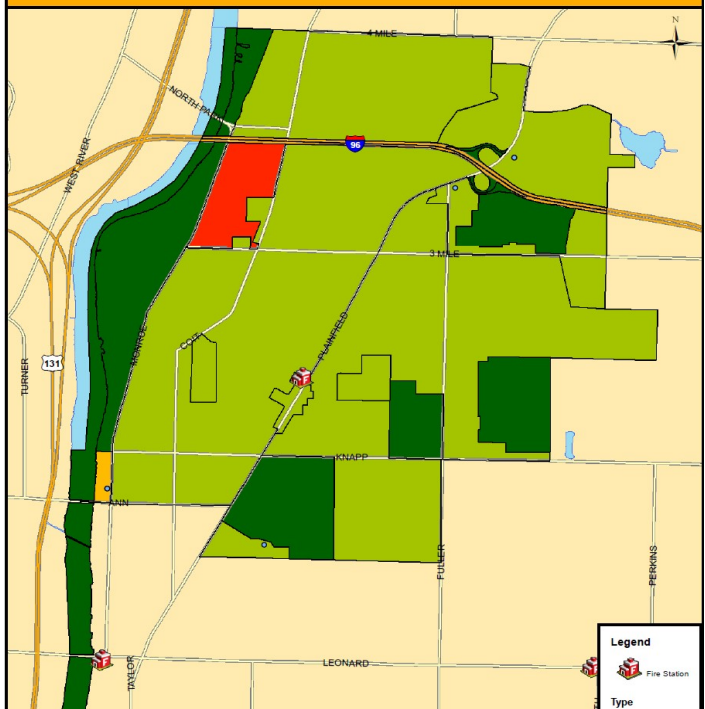
District	Pass	Fail	Compliance
Plainfield	13	11	54.17%
City Wide	416	135	75.50%

Community Risk Reduction Evaluation



District	Home Safety Assessments	Risk Assessments	2016 Property Save Rate
Plainfield	126	160	67.46%
City Wide	1,391	2,969	96.10%

Commercial Development



District	Count	Percent
Plainfield	9	1.05%
City Wide	569	100%

PERFORMANCE GAP ANALYSIS

This page evaluates performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends. In addition, this data compares the current operational capabilities and capacity of the department to the identified risk level within the community.

Once the gaps have been identified, a continuous improvement plan will be developed and tracked throughout the following year to address these existing gaps and variations.

Distribution

- Page 36 - **Citywide Distribution** is at **85.6%** due to several large single company districts on the edge of the city and increasing population/risk.
- Page 44 - **Burton Distribution** is at **78.83%**, due to significant call volume on the east side of the East Beltline.
- Page 54 - **Kalamazoo Distribution** at **72.46%** due to a large amount of calls south of 36th street.

Concentration (Effective Response Force)

- Page 49 - **Covell ERF** is at **60.87%** due to several calls on the highway and the far Southwest end of their district along Lake Michigan drive.
- Page 51 - **Division ERF** is at **60.38%** due to the multiple moderate risk calls along US 131.
- Page 59 - **Leonard ERF** is at **46.55%** due to the calls along the highways and several in the far Northeast corner of their district at Knapp and the East Beltline.

Reliability

- Page 60 - **Monroe Reliability** at **77.77%**. This can be attributed to the slight increase in simultaneous alarms, responding as a rescue on the north half of the city without a second unit in the station, and covering for Plainfield or Leonard when they experience a simultaneous alarm.

Simultaneous

Chester and Leonard are nearing the threshold for additional actions to be taken as their simultaneous trends continue to rise and impact multiple surrounding districts.

- Page 46 - **Chester Simultaneous** at **9.00%**, requiring assistance 199 times.
- Page 50 - **Division Station** at **9.53%**, largely driven by a one day spike of 28 alarms due to the August 20th tornado event.
- Page 58 - **Leonard Simultaneous** at **9.23%**, requiring assistance 186 times.

Benchmark Performance Statements

- Page 31 - **Low risk fire response** is over target by 2 minutes and 4 seconds.
- Page 31 - **Moderate risk fire response** is over target by 1 minute at 22 seconds.
- Page 32 - **High risk fire response** is over target by 1 minute and 21 seconds.
- Page 32 - **Low risk EMS** is over target by 55 seconds.
- Page 33 - **Moderate risk EMS** is over target by 1 minute and 41 seconds.
- Page 33 - **High risk EMS** is over target by 1 minute and 1 second.
- Page 34 - **Low risk HazMat** is over target by 4 minutes and 39 seconds.



**FOR FURTHER INFORMATION ON THIS
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PLANNING DIVISION

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